

CSVS

THE COLLEGE AND SOCIETY FOR CLINICAL VASCULAR SCIENCE Great Britain and Ireland











The Vascular Societies' Annual Scientific Meeting 2024 In conjunction with the Vascular Society of Great Britain and Ireland, the British Association of Chartered Physiotherapists in limb

Absence Rehabilitation, the Society of Vascular Nurses and the College and Society for Clinical Vascular Science of Great Britain and Ireland.

27th - 29th November 2024 DoubleTree by Hilton Brighton Metropole

The College and Society for Clinical Vascular Science of GB & I

Extend our deepest gratitude to









tomorrow...

CARDIOVASCULAR SERVICES

For very kindly supporting and sponsoring our ASM this year.

President's Welcome



The CSVS Executive Committee would like to extend a warm welcome to everyone at the 2024 ASM. It is a particularly momentous event for us as a group as it's the first ASM of the College and Society for Clinical Vascular Science. The renaming of our society is aimed at better representing our evolved job description and work within the NHS.

This year's event will be held at the Hilton Brighton Metropole hotel with concurrent meetings held by the VS, SVN and BAPCAR with the option to attend each session as required. There will also be opportunity for hands on scanning with expert support, run in parallel with the main programme.

The CSVS program starts on Wednesday morning with an advanced skills workshop, covering Vascular Access imaging, lectures, and hands on practical sessions with patient volunteers. The afternoon session starts with a joint symposium with our allied societies on the topic of 'The Diabetic Foot and the Multidisciplinary Team', followed by the Vice President's session on Current Research and RCTs. I am personally looking forward to this session.

The late afternoon session will be a topical lecture on Burnout, followed by a joint Circulation Foundation session on 'The second victim'. Our combined societies rarely speak about these issues, and we are pleased that this has made it onto the agenda.

We shall round off the day at the Vascular Society drinks reception and comedy event which will be followed by the CSVS networking event held at Shelter Hall, Kings Road Arches BN1 1NB. A welcome drink and light snacks will be available with the opportunity to network with our colleagues from across the UK and Ireland. I am hoping to meet as many of the membership as possible at this event.

Our main scientific meeting starts on Thursday morning with abstract presentations and case studies, and we are looking forward to an interactive morning of talks and questions.

The Thursday afternoon aims to address the variation in reporting processes in our society with some thought-provoking talks on current expectations and lack of formal training on this topic. This will be followed by a talk on the medico-legal issues surrounding this topic as well as an interactive discussion and voting session.

The Jackie Walton lecture will be given by Dr Kristiana Gordon on the topic of Lymphoedema with some guidance on reporting practices. This is followed by a talk by Janet Monkman on all the work that the AHCS does on behalf of healthcare scientists. This talk will highlight many of the issues that affect our members and how this is being addressed by AHCS.

Our executive committee will be at hand to answer any questions that you may have, and we shall end the ASM with our awards ceremony followed by the gala dinner in the evening.

I would like to take this opportunity to thank all of the executive committee and sub-committee teams for their superhuman efforts in supporting the society in delivering the ASM and in particular, our conference lead and shadow conference secretary, Klaus Bond, and Nazia Saeed.

Dr Kamran Modaresi BSc (Hons), PhD, AVS, FCVS President - The College and Society for Clinical Vascular Science



Wednesday 27th November Programme **Duke's Suite Regency Suite** Ultrasound **Main Hall** Hall **Registration opens** 07:30 All-Day Parallel Session Ultrasound **PRESIDENT'S WELCOME Practical Room** 09:00 Dr Kamran Modaresi, CSVS President **ADVANCED SKILLS WORKSHOP Vascular Access Imaging Advanced Skills Workshop** 09:10-09:45 **Theory Presentations Discuss Arteriovenous/Graft Creation and Salvage Procedures from a Vascular Surgeon's Perspective Mr Ranjeet Brar** 09:10-09:25 Consultant Vascular and Endovascular Surgeon Clinical Governance Lead Honorary Senior Lecturer, King's College London Vascular Access Mapping and Fistula Surveillance: **Vascular Scientist Perspective** 09:25-09:45 **Benjamin Freedman Clinical Scientist** Head of Service for Vascular Laboratory **Advanced Skills Workshop** Advanced skills workshop **Practical (15mins rotations)** 09:45-10:30 Practical **Ultrasound Practical Room** (15mins rotations) **Duke's Suite** Coffee Practical hands-on continued **Ultrasound Room** 10:30-11:00 throughout coffee and Exhibition Hall break (Practical hands-on continued throughout coffee break)

11:00-12:00 12:00-13:00 13:00-14:00	Advanced Skills Workshop Practical (15mins rotations) Ultrasound Practical Room Duke's Suite Lunch Exhibition Hall Trainee Breakout Session Regency Suite Main Hall	Advanced skills workshop- Practical (15mins rotations)
13:00-14:00	Joint Symposium – The Diabetic Foot and the Multi-Disciplinary Team Chairs: Keith Jones, Sadasivam Selvakumar + Jane Todhunter Main Lecture Theatre Ben Freedman - The role of Focussed Duplex scanning in the Diabetic Foot MDT CSCVS Matthew Fuller - Should a Rehabilitation Physiotherapist be part of the Diabetic Foot MDT including factors that optimise amputation outcomes- BACPAR Justine Tansley - Role of vascular podiatry but with a twist! College of Podiatry Rob Fitridge - Running a remote Vascular diabetic Foot MDT and Vascular Care of Diabetic Foot patients at spoke hospital sites- experience from Australia	Systems Optimisation Hands-on' Get the most out of your machine
	Vice President Session Current Research and RCTs	drop-m
14:20-14:35	Being an Investigative Scientist: How can research skills help? Dr David Barrett Senior Clinical Vascular Scientist Tomorrow Cardiovascular Ltd & Manchester Academic Vascular Research & Innovation Centre (MAVRIC)	
14:35-14:50	GRACE and THRIVE Prof. Daniel Carradice Professor of Vascular Surgery Hull-York Medical School & Prof. Alun Davies Professor of Vascular Surgery Imperial College London	

14:55-15:10	Pelvic Vein Incompetence RCT's and Health Economic Evaluation Mr David Riding Consultant Vascular Surgeon Manchester Academic Vascular Research & Innovation Centre (MAVRIC)	
15:10-15:25	Aorta as a portal for interdisciplinary innovations Prof Regent Lee Professor of Interdisciplinary Innovations, University of Oxford UK Research and Innovation Future Leaders Fellow	
15:30-16:00	Coffee Ultrasound Room and Exhibition Hall	
16:00-16:30	Guest Speaker What's the story with burnout? An interactive talk on trends, causes and solutions Dr Judith Johnson Reader Division of Nursing, Midwifery and Social Work, School of Health Sciences, Faculty of Biology, Medicine and Health, University of Manchester	Systems Optimisation Hands-on'
16:45-17:30	Joint Circulation Foundation session "the Second Victim" Any health care worker, directly or indirectly involved in an unanticipated adverse patient event, unintentional healthcare error, or patient injury, and who becomes victimised in the sense that they are also negatively impacted. Main Auditorium	Get the most out of your machine drop-in
18:00-19:30	VS Drinks Reception & Comedy Session	
19:30-22:30	CSVS Networking Event Shelter Hall Join for a welcome drink and light-bites on the mezzanine floor and Skylark Bar at the fantastic Shelter Hall on the seafront. The ground floor also features a variety of kitchens for you to enjoy during the evening, or you can order food via QR codes upstairs. (A free drink will be available on receipt of a token) 152-154 Kings Road Arches, Brighton BN1 1NB	

Thursday 28th November Programme

Duke's Suite Regency Suite Ultrasound **Main Hall** Hall 07:30 **Registration opens All-Day Parallel** Session **PRESIDENT'S WELCOME** Ultrasound 09:00 **Practical Room** Dr Kamran Modaresi, CSVS President **Scientific Abstract Presentation** 09:05-10:45 Prize session 10mins + 2**Exploring perceptions of clinical vascular** scientists – a UK audit 09:05-09:15 Husnayya Al-Haddad Lewisham and Greenwich NHS Trust **Amputation Prevention Through Ultrasound Surveillance Trial (APTUS)** 09:17-09:27 Mr. Ankur Thapar Anglia Ruskin University **Svstems Optimisation** Setting up a new service; Cambridge Carotid Screening Hands-on' for Specialist Stroke Nurses. 09:30-09:40 **Emily Alderson** Get the most out of your machine Cambridge University Hospitals NHS Foundation Trust drop-in **Advanced Tensor Decomposition and Machine Learning** for Enhanced Detection of AVF Stenosis Using B-Mode **Ultrasound Cine Loops** 09:42-09:52 Sepideh Poushpas Imperial College Healthcare NHS Trust Cost Savings of Doppler Ultrasound versus MRA in Patients with Heavily diseased Below Knee Arteries: A **Quality Improvement Project** 10:00-10:10 Akam Shwan University of Leicester 10:12-10:22 (buffer)

10:24-10:34	The role of vascular scientists in preventative healthcare and encouraging smoking cessation Amine Turay Imperial College Healthcare Trust	Systems Optimisation Hands-on' Get the most out of
10:35-10:45	Ultrasound based turbulence quantification can predict intimal hyperplasia development in arteriovenous fistula. Matthew Bartlett Royal Free London NHS Ft	your machine drop-in
10:45-11:30	Coffee Ultrasound Room and Exhibition Hall	
11:30-11:50	Guest Speaker What is the AHCS doing for you? Janet Monkman CEO and registrar at the AHCS	
	Case Study Abstract Presentations Prize session 10mins +2	
11:55-12:05	Abnormal Finding of a Patient with a Pulsatile Mass Anice Aidi King's College Hospital NHS Trust	
12:08-12:18	Think Zebras: Identification and Investigation of Vascular Mimics Ben Warner-Michel Kingston Hospital NHS Foundation Trust	
12:20-12:30	Interesting cases visualised with ultrasound Nicholas Zakikhani St Georges University Hospital	
12:33-12:43	A rare case of Posterior Tibial Artery traumatic pseudoaneurysm with unique haemodynamic changes Nikolaos Sanoudos Mid and South Essex NHS Trust	
13.00-14.00	Lunch	
13.00-14.00	Exhibition Hall	

14:00-14:15	Guest Speaker 'From Carotid webs to near-occlusions -the value of duplex imaging in making challenging diagnoses' Mr Dominic PJ Howard Oxford University Hospitals NHS FT	Systems Optimisation Hands-on' Get the most out of your machine drop-in
14:15-14:20	The Challenging Art of Report Writing Topic introduction by Dr Kamran Modaresi, CSVS President	
14:20-14:30	Think like a clinician What information do the clinicians actually need? What's helpful, what's not. Mr Tahir Hussain London Northwest University Healthcare NHS Trust	
14:30-14:40	Current Reporting packages/tools examples from the Exec team	
14:45-15:20	Keynote Speaker Medico-legal implication in Vascular Ultrasound: the importance of getting the basics right and the role of Expert Witness, including reporting and terminology' Amir Bennett Senior Lecturer in Ultrasound Education and Clinical Programme Director for Clinical Ultrasound at King's College London	
15:20-15:30	Discussion and Slido Surveys	
15:30-16:00	Coffee Ultrasound room and Exhibition Hall	

16:00-16:45	Jackie Walton Lecture				
16:00-16:30	Lymphoedema Dr Kristiana Gordon Consultant in Dermatology and Lymphovascular Medicine & Clinical Lead of the Lymphoedema Service St George's Hospital, London where her team care for thousands of patients with primary and secondary lymphoedema from across the UK				
16:35-16:45	Imaging of lymphatics during vascular scans - what to report, when and how' Ben Warner-Michel				
16:45-17:00	 Ann Donald Award Prize Giving Honorary Membership AVS awards 				
17:00-18:00	AGM				
19:00-22:00	Conference Gala Dinner				

Wednesday 27th November Speaker Biographies

Advanced Skills Workshop

Vascular Access imaging

Theory Presentations

Discuss Arteriovenous/Graft Creation and Salvage Procedures from a Vascular Surgeon's Perspective

Mr Ranjeet Brar

Consultant Vascular and Endovascular Surgeon, Clinical Governance Lead Honorary Senior Lecturer, King's College London



Ranjeet has been a consultant surgeon for ten years and has expertise in open and endovascular aortic surgery, carotid surgery and lower limb revascularisation as well as venous and Trauma surgery. He is an expert in the management of the diabetic foot and participates in the world renown King's diabetic foot MDT. He is a former lower limb revascularisation fellow at St Thomas' Hospital, and is an expert in layer limb vascular surgery, including lower-limb bypass, lower limb angioplasty and stenting, and combining these techniques to perform hybrid lower limb revascularisation.

Ranjeet has been a research fellow of the Royal College of Surgeons of England and

is an experienced medical and surgical educator. He was an early holder of the Royal Sussex and Vascular Society access fellowship, and at King's College Hospital and continues to provide access support to the busy King's renal unit and dialysis centres.

Ranjeet shares his insight into the surgical perspective on creation and management of access for dialysis.

Vascular Access Mapping and Fistula Surveillance: Vascular Scientist Perspective.

Ben Freedman

Clinical Scientist Head of Service for Vascular Laboratory



After undergraduate studies in biomedical science at Sheffield University I started training as a vascular technologist in 2001 at King's College Hospital under the watchful eyes of Colin Deane and David Goss and have been there ever since.

Gaining MSc in Medical ultrasound from KCL and SVT accreditation in 2004, I have stayed and developed an interest in teaching and training and hold the post of honorary senior lecturer for the ultrasound programme at King's College London.

I have also completed the equivalence process gaining registration as Clinical Scientist during 2016 and the Mary Seacole Award with the NHS leadership academy in 2019.

I currently manage the team of Clinical Vascular Scientists in the Vascular Lab at Denmark Hill site of King's College Hospital. I joined the SVT exec committee in 2018. My main interests are in imaging diabetic foot and vascular access.

Vice President Session Current Research and RCTs

Being an Investigative Scientist: How can research skills help?

Dr David Barrett Senior Clinical Vascular Scientist Tomorrow Cardiovascular Ltd & Manchester Academic Vascular Research & Innovation Centre (MAVRIC)



"I completed my undergraduate degree in Medical Sciences at the University of Leeds before moving to Cancer Research in London to complete my MSc in Biotechnology. Having gained an interest in research, I completed my PhD in Medical Engineering at Queen Mary University of London and UCL. After completing 2 years as a post-doc I wanted to switch petri-dishes for patients and made the move back to Manchester to take up a trainee Clinical Vascular Scientist position at Tomorrow Cardiovascular. I gained my AVS accreditation in 2022 and have continued to build on my interest in Vascular research, particularly in the diagnosis of popliteal artery entrapment syndrome.

I believe the continued development of research skills as a Clinical Vascular Scientist can help shape the future of vascular ultrasound diagnosis for the better, something I hope to convince you on today.

Outside of work, I spend most of my time running and enjoy being creative through photography and painting."

GRACE and THRIVE



Prof. Daniel Carradice Professor of Vascular Surgery Hull-York Medical School

Dan Carradice is the Professor of Vascular Surgery at the Hull York Medical School. He is the Joint Clinical Lead and an Honorary Consultant in Vascular and Endovascular Surgery at Hull University Teaching Hospitals. His national roles include Vascular Surgical Specialty Lead at the Royal College of Surgeons of England, the Chair of the Venous Research Special Interest Group of the VSGBI,

Editor in Chief Vascular Research UK YouTube and Editor Journal of the Vascular Societies of Great Britain and Ireland.

He is a passionate supporter in the value of imaging and physiological assessment in both clinical practice and research. In 2008 he was successfully awarded a Postgraduate Certificate in Medical Ultrasound with Distinction by the University of Leeds and has continued to use and develop this skill on a daily basis in clinical practice, research and education. He has the pleasure of working collaboratively with valued members of the CSVS and looks forward to developing these partnerships further in the future.



Prof. Alun Davies

Professor of Vascular Surgery Imperial College London

Professor Alun H Davies is Professor of Vascular Surgery at Imperial College London/NIHR Senior Investigator and an Honorary Consultant Surgeon whose NHS practice is based at Charing Cross and St Mary's Hospital, London. Professor Davies trained in Cambridge, Oxford, Plymouth, Harvard and Bristol, prior

Professor Davies trained in Cambridge, Oxford, Plymouth, Harvard and Bristol, prior to taking up a consultant appointment in Charing Cross in 1994.

He is a Fellow of the Learned Society of Wales and a Fellow of the Academy of Medical Science.

He is the Editor in Chief of Phlebology, past President of the European Venous Forum, General Surgical Forum at the RSM & The Venous Forum at The Royal Society of Medicine.

He is the current President of the European College of Phlebology.

He has been a Hunterian Professor and Arris & Gayle Lecturer at the RCS England.

He is an "Emeritius" Fellow of the Australasian College of Phlebology, Distinguished Fellow of the American Venous Forum and Honorary Fellow of the American Venous and Lymphatic Society (AVLS).

He is the current chair of the UIP Scientific Committee.

He was the Chairman of the Varicose Vein Guideline Group for the NICE (National Institute of Clinical Excellence), a member of the Quality Standards Group has co-chaired the first ESVS guidelines group on the management.

He is a special advisor to the NHS Evidence Based intervention programme.

He sits on the NIHR CET funding committee.

He is invited as a member of faculty to many international meetings.

He also written extensively on many aspects of venous/vascular disease, writing over 600 peer reviewed manuscripts and he runs a large research group, having supervised over 60 higher degrees (PhDs).

He has raised, more than $\pounds 30,000,000$ for research in the last 5 years.

He conducts clinical and laboratory-based research; some of the clinical trials he has been Chief Investigator on include COMETA, GRACE, PETS, THRIVE, AVULS, GAPS & EVRA, all of which have/will impact on international venous practise and multiple on-going trials.

Clinically he runs a busy tertiary vascular surgical practise including the management of not only superficial venous disease, but complex deep vein and compression syndromes.

Pelvic Vein Incompetence RCT's and Health Economic Evaluation

Mr David Riding

Consultant Vascular Surgeon

Manchester Academic Vascular Research & Innovation Centre (MAVRIC)



David was appointed as Consultant Vascular Surgeon at Manchester Royal Infirmary in 2022. He has a special interest in venous pathology and was awarded a PhD by the University of Manchester in 2019, focussing on the management of pelvic vein incompetence in women with chronic pelvic pain. He chaired the Royal College of Surgeons of Edinburgh's Trainees' Committee between 2018 and 2020, sitting on College Council as Trainee Representative. He continues to be part of the team developing the College's anti-bullying work, which has been nominated for BMJ and HSJ Awards. He has promoted surgical trainees' need for a more positive working culture to various public bodies including NHS England, the GMC, the BMA, and the UK Parliament. He has recently been appointed as co-TPD for Support and Wellbeing in Surgery at Health Education North West.

Aorta as a portal for interdisciplinary innovations

Prof Regent Lee

Professor of Interdisciplinary Innovations, University of Oxford UK Research and Innovation Future Leaders Fellow



Regent is a surgeon scientist innovator and clinical entrepreneur. He is the only vascular surgeon to currently hold a UK Research Innovation Future Leaders Fellowship. His research focuses on interdisciplinary innovations that have cross sector impact, leading to patents and university spinout companies. Regent leads the international AICT consortium towards delivering AI solutions for CT imaging. His team is further developing novel healthcare solutions that will support healthcare systems' transition to net zero.

Guest Speaker

What's the story with burnout?

An interactive talk on trends, causes and solutions

Dr Judith Johnson

Reader

Division of Nursing, Midwifery and Social Work, School of Health Sciences, Faculty of Biology, Medicine and Health, University of Manchester

Abstract:

Even prior to the onset of the Covid-19 pandemic, healthcare professionals were experiencing high levels of burnout internationally. The pandemic introduced new stressors, leading to an increase in burnout rates which have yet to reduce to pre-pandemic levels. This talk will make the case that burnout is an organisational problem, rather than a personal issue which individuals should grapple with. Evidence linking burnout with poorer patient care delivery will be presented, alongside a useful theoretical model which outlines the key work dimensions which cause burnout. It will then consider potentially useful interventions which teams and organisations can implement to support their staff and reduce burnout. The talk will be interactive and look to engage the audience to share their thoughts on this topical issue.



Dr Judith Johnson is a Reader in the School of Health Sciences at the University of Manchester and the Director of the Manchester Clinical Academic Centre. She is a practitioner Clinical Psychologist and holds a PhD from the University of Manchester and a Clinical Psychology Doctorate (ClinPsyD) from the University of Birmingham. In 2024, she was awarded the May Davidson Award, a British Psychological Society Award for clinical psychologists who have made an outstanding contribution to the development of their discipline within the first 10 years of their qualified work. Judith's research focuses on healthcare staff wellbeing, burnout and communication. Her work has been funded by the National Institute for Health Research (NIHR), the

British Medical Association (BMA), the Society and College of Radiographers and the Burdett Nursing Trust, amongst others. She has published over 90 peer-reviewed articles in high-quality journals including the BMJ, International Journey of Surgery and Academic Medicine. Her work has been covered by The Guardian, The Independent, BBC News and BBC Radio 4, and has been referred to in guidance documents published by the World Health Organization, the British Medical Ultrasound Society and the Society and College of Radiographers.

Thursday 28th November Speaker Biographies

Scientific abstract presentations

Exploring perceptions of clinical vascular scientists – a UK audit

Husnayya Al-Haddad Lewisham and Greenwich NHS Trust



My service in the NHS is longstanding of over 14 years, including 10 years as AAA screener with NAAASP. During this time, I developed an interest in training and contributed to the accreditation of many screeners. I completed my Master's in Vascular Medical Ultrasound at Imperial College in 2022 and gained my first role as trainee Clinical Vascular Scientist at Lewisham and Greenwich Trust (LGT) in 2023. Leading on from my passion of teaching, I am grateful to annually lecture MSc students at Imperial College on my experiences with the AAA screening programme and the importance of Quality Assurance. In addition, I have enjoyed contributing short articles in the CSVS newsletters and look forward to continuing my passion for writing.

After passing my internal competencies at LGT, I am currently working towards full AVS accreditation. I am interested in service improvement audits and innovative projects, including the use of AI in healthcare. Outside of work, I'm a busy mum to two children, aged ten and six.

ABSTRACT

Objectives

The National Clinical Vascular Scientist Audit 2024 (NCVSA) aimed to identify potential gaps and disparities in training, quality assurance (QA), and research across vascular laboratories in the United Kingdom.

Method

An online questionnaire was created using Microsoft Forms distributed to Scientist Training Programme (STP) trainees, trainee Vascular Scientists, Clinical Vascular Scientists (CVS), and lead CVS via NHS email and LinkedIn. A combination of open and closed-ended questions was used addressing structure of training, quality assurance (QA) measures, research opportunities, involvement in multidisciplinary meetings (MDT), and overall sense of support.

Results

Out of 46 total responses, a lack of structure, lack of feedback and limited training time were common concerns among STP trainees and trainee vascular scientists. More than 70% of respondents were aware of QA measures in their laboratory primarily performed by lead scientists. Less than 50% of scientists engaged in research citing a lack of time as a significant barrier. 50% of respondents cited attending MDTs while some expressed disinterest. All trainees and CVS unanimously expressed working collaboratively across trusts to improve skillsets. Lastly, more than half of lead scientists felt unsupported within their roles.

Conclusions

While it is encouraging that QA measures are in place, the inconsistency across trusts is clinically alarming. Furthermore, the survey identified substandard training contributing to the overwhelming dissatisfaction amongst trainees thus prompting an urgent review. The lack of support cited amongst lead vascular scientists indicates a need for a thorough evaluation which could possibly help to understand the gaps within training.

Amputation Prevention Through Ultrasound Surveillance Trial (APTUS)

Ankur Thapar Anglia Ruskin University



Ankur is an academic vascular and endovascular surgeon with a joint appointment between the Centre for Circulatory Health and MSE NHS Foundation Trust. In this role he leads the academic vascular programme, responsible for training and developing academic nurses, FYs, CTs and STRs.

ABSTRACT

Background

In the UK, each year, 4000 major amputations are performed for chronic limb threatening ischaemia. The mainstay of treatment is endovascular therapy, with 17, 000 procedures annually. These procedures have a restenosis risk of 50% over 2 years. In 2019, ESVS guidelines recommended an ultrasound surveillance programme after endovascular therapy but with no evidence of feasibility, acceptability, impact on clinical decision making or better limb salvage.

Our meta-analysis found 2 small non-randomised, low-quality trials which suggested 1 in 5 amputations could be prevented through the introduction of ultrasound surveillance.

Aims and Objectives

DUSTER is an NIHR funded trial and will answer:

- What is the patient acceptability of ultrasound surveillance?
- Which components of ultrasound surveillance are most feasible?
- Does ultrasound surveillance impact clinical decisions to re-intervene?
- What are the barriers to ultrasound surveillance?

Methods

Phase 1: 3 site feasibility RCT with 1:1 randomisation

P- 70 adults with chronic limb threatening ischaemia who have had successful lower limb endovascular therapy I - 1 year integrated ultrasound plus clinical surveillance programme at 1, 6 and 12 months

C – standard clinical surveillance at 1, 6 and 12 months

O – Process endpoints: % uptake of ultrasound appointments, technical completion rates of ultrasound components and re-intervention rates in both arms. Secondary endpoints are complications of re-interventions, limb salvage, amputation free survival, pain scores, EQ5D, VascuQoL-6, Barthel index of independence

Phase 2: Semi-structured interviews with intervention arm exploring barriers and attitudes to ultrasound surveillance

Setting up a new service; Cambridge Carotid Screening for Specialist Stroke Nurses.

Emily Alderson

Cambridge University Hospitals NHS Foundation Trust



I graduated from the STP in 2023 and I am currently working as a Clinical Vascular Scientist at Addenbrookes Hospital in Cambridge. In addition, I am an external examiner for current STP students at Newcastle University. I am in the process of working towards AVS accreditation.

ABSTRACT

The Vascular Studies Unit (VSU) at Cambridge University Hospitals (CUH) receives, on average, 18 carotid duplex requests from A&E per month for suspected stroke/TIA patients. In 2023, only 16% of these had clinically significant results; however, in order to receive their carotid duplex, patient's stay in A&E was prolonged, they were admitted, or had to return as an outpatient. Out-of-hours, patients receive a computed tomographic angiogram (CTA), which increases risk to patients.

We wanted to streamline our service to ensure all A&E stroke and TIA patients receive timely carotid imaging.

At CUH, Specialist Stroke Nurses (SSNs) provide a seven-day service and assess patients in A&E; therefore, they are well placed to perform carotid screening. We found no evidence nationally of a carotid screening protocol or training programme. Consequently, we began programme development using our experience of the NICE-approved National Abdominal Aortic Aneurysm Screening Programme.

Training is comprised of three stages; each stage requires specific numbers of supervised and/or unsupervised scans and image quality assurance, followed by a clinical assessment.

Carotid screening performed by SSNs will identify patients with minor carotid disease (<30%) who do not require a full carotid and vertebral artery duplex in the VSU. In cases of unusual anatomy or poor views, SSNs will have a low threshold for referring patients to the VSU.

Training SSNs commenced in May 2024. Once SSNs pass competency assessments, the effect of the service implementation on A&E wait times, out of hours CTA, and scanning burden in the VSU, will be assessed.

Advanced Tensor Decomposition and Machine Learning for Enhanced Detection of AVF Stenosis Using B-Mode Ultrasound Cine Loops

Sepideh Poushpas Imperial College Healthcare NHS Trust



As a Clinical Vascular Scientist working at Imperial College Healthcare NHS Trust, I focus on advancing diagnostic techniques and clinical management for patients with kidney failure and stroke. My research focuses on bringing the gap between innovation and practice, ensuring that advancements are directly applied to improve patient care and decision-making in everyday clinical settings.

ABSTRACT

Duplex ultrasound (DUS) is a standard tool for monitoring arteriovenous fistulas (AVFs) in patients undergoing dialysis. Despite widespread use, DUS has limitations in accurately predicting AVF outcomes due to operator dependence and variability in evaluating multidirectional blood flow. To address these limitations, this study explored the feasibility of a novel method that combines tensor decomposition of B-mode ultrasound cine loops (videos) with machine learning to detect AV stenosis more effectively.

We analysed real time B-mode videos of arterial inflow, anastomosis, and venous outflow in 22 patients with AVFs. Tensor decomposition was applied to both full-frame (whole-image) and cropped videos focusing on blood flow regions. Features extracted from these videos were labelled for stenosis presence based on DUS assessments of blood flow volume, vessel diameter, flow velocity, and spectral waveform characteristics.

Out of 66 videos collected, 61 were analysed. The full-frame classifier yielded a mean area under the receiver operating characteristic curve (AUROC) of 0.49 (Cl 0.48 to 0.50), which was not significantly superior than random guessing. In contrast, the classifier trained on cropped video segments showed a mean AUROC of 0.82 (Cl 0.66 to 0.96), demonstrating substantial improvement in predictive accuracy despite the limited dataset size.

These results highlight the potential of combining tensor decomposition with machine learning for enhanced AVF stenosis detection. This approach promises greater accuracy and reduced reliance on operator-dependent techniques, suggesting a pathway for more reliable and efficient AVF surveillance. Future work will focus on automating the cropping process and validating these findings with larger datasets.

Cost Savings of Doppler Ultrasound versus MRA in Patients with Heavily diseased Below Knee Arteries: A Quality Improvement Project

Akam Shwan University of Leicester



Vascular surgery registrar based in Leicester, currently undertaking PhD at the University of Leicester. MSc in Health Economics at the University of Aberdeen. Areas of research interest: Patient-reported Outcome Measures, research waste, cost-effectiveness, and health economics.

ABSTRACT

Purpose:

To assess the avoidable extra cost per patient, total cost, and healthcare resource use associated with the care of patients with heavily diseased below knee arteries in whom, on top of their Doppler US results, cross-sectional imaging was deemed "necessary" in assessing the below knee arteries for definitive management plan.

Method:

All patients with Peripheral Artery Disease (PAD) who had MRA on top of Doppler US as part of their work up in their management at a tertiary hospital between September 2021 to September 2022 were followed up. The effect of having MRA on the final decision making was assessed as well as estimated added hospital stay duration, cost of extra imaging, resource use, total cost, and incremental effectiveness ratio were calculated.

Results:

During the 12-month period, a total of 560 patients with suspected PAD had Doppler US. Sixty eight (12.1%) had MRA before the definitive management plan. Among the 68 patients, 42 (61.7%) had similar findings on Doppler and MRA. The definitive decisions were estimated to be unaffected by the added MRA in 59 (86.7%) of the patients. Average added hospital stay were four days, added extra cost per patient were estimated at 3,860 GBP. The total avoidable healthcare cost, if more rigorous and careful patient selection were in place was estimated to be 227,740 GBP.

Conclusion:

Doppler US is a valuable tool for assessing PAD patients with heavily diseased arteries. Careful patient selection can improve efficiency, prevent unnecessary further imaging, and lead to better utilisation of resources.

The role of vascular scientists in preventative healthcare and encouraging smoking cessation

Amine Turay Imperial College Healthcare Trust



I am a vascular scientist at Imperial college healthcare trust. I have been working there for 5 years. I have recently taken an interest in supporting patients with smoking cessation.

ABSTRACT

In 2022, approximately 13% of adults aged 18 or over smoked cigarettes in the UK. Smoking is a major preventable risk factor in vascular disease. It's associated with an increased likelihood of negative post-procedural outcomes, the worsening of disease and an increase in healthcare usage.

Patients are 3-4 times more likely to quit smoking successfully with healthcare professional support. Clinical Vascular Scientists have a large exposure to patients that smoke and are an underutilised workforce in smoking cessation.

As part of an improvement project funded by NIHR, Clinical Vascular Scientists at Imperial underwent training in how to have effective conversations with patients relating to smoking cessation. The aim was to empower staff and to create an environment where staff felt more confident in advising patients and signposting them to the appropriate support services.

Questionnaires were carried out to demonstrate whether there was a change in staff attitude as a result of training and mean team confidence increased by 30% post training. In addition, public and patient involvement was sought to establish preferred methods of delivering cessation information. Currently we are measuring the frequency at which conversations regarding smoking cessation are being had and whether signposting is occurring and plan to measure effectiveness of these activities going forward.

We would like to share our local lived experience of setting this programme up within our department, examining the difficulties that were faced and highlighting the department's progress and future plans in the hope help other vascular ultrasound departments interested in preventative practice.

Ultrasound based turbulence quantification can predict intimal hyperplasia development in arteriovenous fistula.

Matthew Bartlett Royal Free London NHS Ft



Matt has over 15 years' experience in Vascular Ultrasound and is the research lead for the Royal Free London Vascular Studies department.

Matt is passionate about ultrasound training and education, he teaches Ultrasound Physics at City St Georges, University of London and has lectured for educational events organised by the CSVS, Canon Medical and Wessex Diagnostic, amongst others.

As a member of University College London's Multiscale Cardiovascular Engineering Group, Matt's research interests are focussed on vascular remodelling secondary to complex haemodynamics. His work explores the translation of knowledge from computational fluid dynamics into tools suitable for the clinical environment.

ABSTRACT

Introduction:

Imaging surveillance does not offer significant improvements to long term arteriovenous fistula (AVF) patency, but the haemodynamic information obtained using Doppler ultrasound, may hold the key to developing improved monitoring techniques.

Objectives:

- Develop a simple tool for analysing the complex haemodynamic data contained within a Doppler spectrogram and quantify the level of turbulence present.
- Validate the tool using patient specific in-silico simulations, and in-vivo trials.

Materials & Methods:

Patients with newly created AVF underwent duplex scanning post-surgery. Cardiac gated audio recordings of the Doppler shifted frequency spectrum were obtained and an ensemble averaging technique was employed to extract the frequencies relating to turbulent components of the flow field. Ultrasound Turbulence Intensity Ratio (USTIR) was calculated in different regions of the flow circuit and compared with distribution of oscillatory shear index (OSI) on the computational simulations, and with neointimal hyperplasia (NIH) development on the 10 week maturation scan.

Results & Summary

Distribution of ultrasound-based turbulence intensity ratio corresponds with regions of elevated oscillatory shear stress and accelerated NIH formation. ROC curve analysis found a USTIR >6.4 of the pre-maturation scans, could predict development of haemodynamically significant NIH at 10 weeks with a sensitivity of 87.5% and a specificity of 80%.

Guest Speaker

What is the AHCS doing for you?

Janet Monkman CEO and Registrar at the AHCS



Janet joined the Academy as CEO in February 2013, bringing with her a strong commitment to the values of the Academy.

She understands the benefits of bringing together, through the work of the Academy the entire Healthcare Science profession to better benefit patient care, and to advance the profile of the Healthcare Science workforce.

Janet has had a long career in healthcare building from her work as a clinician, teacher and later management. She has a wide portfolio of experience in executive, chief executive and non-executive roles in public, private and third sector.

Abnormal Finding of a Patient with a Pulsatile Mass

Anice Aidi King's College Hospital NHS Trust



I have recently qualified as a Clinical Vascular Scientist and after just completing the STP in 2023, I am now working at Kings College Hospital in London. I presented my STP research project at the last SVT conference and I look forward to presenting an interesting case study this year.

ABSTRACT

A 54 year old female was referred to the vascular clinic by her GP due to a pulsatile mass on her right neck, which has been there for over a year and accompanied with occasional headaches.

A carotid ultrasound scan was initially requested. No significant atherosclerotic or aneurysmal disease was visualised however a bovine arch anatomy was noted. Also observed were some venous collaterals on the ipsilateral side but the IJV, subclavian and axillary veins were patent. A CT follow-up revealed that the contralateral brachiocephalic vein was severely stenosed, most likely due to compression between the sternum anteriorly and the dilated common trunk of the bovine arch posteriorly, also known as aortosternal venous compression.

The altered venous haemodynamics of venous draining from both the left arm and neck being diverted via collateral routes to the right IJV may explain the gradually increasing symptom of a pulsatile neck lump.

No intervention was required once the diagnosis was confirmed.

Similar cases have been recorded however all of which report on aortosternal venous compression being caused by an aberrant subclavian artery, rather than the ectatic bovine arch as the cause in this case.

Although in this case a brachiocephalic vein stenosis may not be obvious on ultrasound, findings such as the presence of venous collaterals or changes in venous flow should be documented and prompt full venous evaluation either with ultrasound or other imaging modalities.

Think Zebras: Identification and Investigation of Vascular Mimics

Ben Warner-Michel

Kingston Hospital NHS Foundation Trust



Ben is a clinical specialist sonographer at Kingston Hospital, having originally trained as a vascular scientist at the Jackie Walton Vascular Studies Unit in Oxford before retraining as a general and obstetric sonographer, and subsequently becoming the clinical lead for ultrasound at Salford Royal Hospital. Ben is currently the practice educator for vascular ultrasound at Kingston, a role that primarily focuses on training general and obstetric sonographers to perform vascular ultrasound examinations to a high clinical standard. Also, very passionate

vascular ultrasound examinations to a high clinical standard. Also, very passionate about education, Ben frequently gives talks to radiology and maternity departments on the proper application of Doppler imaging techniques in general and obstetric ultrasound examinations.

ABSTRACT

Pathologies of the peripheral vascular system, especially those involving venous disease, usually present with symptoms including generalised or localised pain and oedema. When patients present with these symptoms, it is often prudent to exclude vascular pathology such as venous thrombosis or peripheral arterial disease using duplex ultrasonography.

However, there are occasions in which these phenomena are caused by other types of pathology that mimic vascular symptoms. Vascular ultrasound operators are likely to encounter these pathologies throughout their practice, and in these instances it can be difficult to know how best to scan and report these findings.

In this talk I will present a few such case studies from my own recent practice, and discuss how to image, assess and describe vascular mimics using sonographic terminology in order to ensure that the patient receives the most efficient and appropriate management.

Interesting cases visualised with ultrasound

Nicholas Zakikhani St Georges University Hospital



Nick is the lead vascular scientist at St George's Hospital and also performs vascular ultrasound at Cleveland Clinic London Hospital and UK Vein Clinic. He has a particular interest in qualitative healthcare analysis to improve factors such as patient engagement, patient outcomes and staff creativity.

ABSTRACT

Given the high user dependence of ultrasound imaging, it is vital that we expose ourselves and discuss less common, challenging and "unusual" cases. We don't know what we don't know.

Within this talk, I will discuss cases found within the Vascular Lab at St George's Hospital that were more challenging and required multi-disciplinary assistance. Such cases included the disagreement of the identification of a carotid web, cystic adventitial disease of the popliteal artery and carotid stenosis secondary to radiotherapy.

A rare case of Posterior Tibial Artery traumatic pseudoaneurysm with unique haemodynamic changes

Nikolaos Sanoudos Mid and South Essex NHS Trust



Nikolaos Sanoudos MSc. A.V.S. R.V.T. ARDMS

Lead Vascular scientist in Broomfield Hospital, Chelmsford, Mid and South Essex NHS Foundation Trust.

A very experienced Clinical Vascular Scientist with more than 30 years on the field and with more than 100.000 vascular scans of all kind.

Participated in many research programs and published and presented scientific papers in conferences.

Having worked mostly in NHS and the private sector he has improved his communication skills with patients and physicians, and is very keen on innovation, and quality improvement.

He has taught trainees vascular ultrasound principles and applications.

Accredited Vascular Scientist from CSVT for UK and Ireland

Registered Vascular Technologist from the American Registry for Diagnostic Medical Sonographers. (ARDMS). Accredited Register Physicist from Academy for Healthcare Science.

Member of Professional Standards Committee for CSVT for UK and Ireland.

MSc on "healthcare management" from Anglia Ruskin University, UK.

MSc on "Biomedical Eng." from the University of Surrey, UK.

MSc and BSc in "Electrical Engineering". Democritus University, Greece

ABSTRACT

Introduction:

Traumatic pseudoaneurysms of the limbs are rare, with few cases described in literature. Assessment can be performed by Duplex ultrasound and CTA and assist in treatment decisions. We describe a case of traumatic Posterior Tibial Artery (PTA) pseudoaneurysm, with haemodynamic complication, which was assessed with duplex ultrasound leading to surgical management.

Case Report

28 years old male patient presented, with post compartment syndrome secondary to midshaft right tibial fracture from football injury. He underwent intramedullary nailing, fasciotomy and subsequent skin grafting. The patient has had multiple recurrences of infected haematoma. The Duplex examination showed that within the largest collection there was a large PTA active pseudoaneurysm 5.2x3.2x3.4cm. It also showed antegrade biphasic flow to the pseudoaneurysm from the proximal PTA and unexpectedly retrograde biphasic flow to the pseudoaneurysm from the distal PTA. The retrograde flow was identical to the peroneal artery flow from an above ankle collateral. There was normal triphasic flow in the Anterior Tibial Artery.

The patient underwent surgical exploration of the right PTA and excision of the pseudoaneurysm as well as washout of the wound and some of the haematoma. The PTA finally had to be ligated.

The patient needed antibiotic treatment and recovered well.

Conclusion:

PTA traumatic pseudoaneurysms can rapidly be differentiated from other lesions using vascular ultrasound. The haemodynamic analysis gives an important view of the changes induced and prepares the treatment.

Poster Presentation



Amber Ahmed-Issap University Hospitals Of North Midlands

I am a Clinical Teaching Fellow at Keele University and have completed my foundation year training at the University Hospitals of North Midlands. My current interests are in surgery with a particular focus on Cardiothoracics and Research.

Large right subclavian artery aneurysm presenting in a young patient:

A Case Report.

Subclavian artery aneurysms are extremely rare, accounting for less than 1% all of peripheral aneurysms. They are often due to atherosclerosis or thoracic outlet syndrome and present at an average age of 47 years. Here, we present an incidental finding of an 18 mm rapidly increasing aneurysm involving the first and second part of the right subclavian artery in a woman in her 20's. To our knowledge, this is the youngest patient presenting with a right subclavian artery aneurysm who underwent surgical resection of the aneurysm with repair using interposition graft and successful re-implantation of the vertebral artery with antegrade flow. This report highlights the multidisciplinary care between vascular, interventional radiology and cardiothoracic teams at our tertiary hospital due to the complex nature of the aneurysm.



Veronica Sagayarajah London Northwest NHS trust

I competed my Postgraduate master's degree in vascular medical ultrasound at the Imperial College in 2015, this opened doors to my career as a vascular scientist. I was fortunate to start my training at the John Radcliffe, part of the Oxford University Hospitals in 2016 and went on to become accredited in 2019. I currently work as one of the senior vascular scientists at the London North West Trust and am a member of the CSVS professional standards committee team. I have enjoyed contributing to

writing the guidelines in Giant Cell Arteritis (GCA) which are designed to inform good clinical practice and stream line the walk-in service we have for these patients. The vascular imaging lab at LNWH NHS Trust also offers a walk in and one stop service to the TIA and stroke team.

Discuss the CEA pick up rate in stroke patients across the London Northwest borough

Introduction

Studies have shown that carotid endarterectomy (CEA) is advantageous in the treatment of symptomatic carotid stenosis however the number of CEAs performed has decreased markedly over the years. The objective of this retrospective audit is to look at the pick-up rate for CEA in stroke patients who have been referred for vascular input following a carotid Duplex across the LNW borough between 2019-2023.

Methods

Retrospective review of patients records using PACS, EPRO and CERNER in our unit from 2019-2023 and compared with data from the National Vascular Registry (NVR).

Results

The number of carotid endarterectomies seems to have reduced over the years. The total number of carotid Duplex performed during audit interval was 4713. In 2019, 893 Duplexes were performed.

Of these, 111 patients (11.7%) were identified with a significant (50%) ICA stenosis.

- Mean age 77
- 76M : 35F
- Of these patients, 41 received CEA at Northwick Park Hospital (NWP).

CEA on NVR database

- 222 endarterectomies recorded on NVR database for study period 2019-2023.
- 41 endarterectomies (18%) in 2019
- 35 patients were identified from Duplex at NWP.
- 1 patient had an endarterectomy on a <50% ICA stenosis
- 3 patients were from Hillingdon
- 1 patient had Duplex done in 2018.
- 2 patient details were entered incorrectly

Conclusion

There needs to be better communication between stroke and vascular teams and the decision to offer CEA should be made in an MDT environment.

CEA data should be entered on the NVR by the operating clinician.

'From Carotid webs to near-occlusions-the value of duplex imaging in making challenging diagnoses'

Mr Dominic PJ Howard Oxford University Hospitals NHS FT



Mr Dominic PJ Howard BM BCh MA DPhil (Oxon) FRCS

Oxford Vascular Study Senior Clinical Fellow - Centre for Prevention of Stroke and Dementia CI for the ADVANCE Trial Consultant Vascular Surgeon Oxford University Hospitals NHS Trust, United Kingdom

Mr Howard an academic vascular surgeon whose research interests focus on the epidemiology of vascular disease. Since 2010, he has gathered unique data on a population-cohort of 100,000 people and published on improving the primary and secondary prevention of carotid, aortic, and peripheral vascular disease. He has won several awards, including The Queen's Prize for Higher Education, The Vascular Society Sol Cohen Prize (twice), The European Stroke Association Young Investigator Award, and the Charing Cross Symposium Clinical Prize.

The Challenging Art of Report Writing Topic introduction by Kamran Modaresi, CSVS President

Think like a clinician. What information do the clinicians actually need? What's helpful, what's not?

Mr. Tahir Hussain London Northwest University Healthcare NHS Trust



I am a Consultant Vascular, Endovascular Surgeon at North West London University NHS Trust and the Royal Brompton Hospital. I am also Honorary Senior Lecturer at Imperial College Medical School.

I was trained in the Oxford Deanery and have a Masters in Surgery, from St. Bartholomew's Hospital in blood flow of the lower limb which led to a Hunterian Professorship, Royal College of Surgeons of England.

I have been a consultant for 20 years and have held various positions of responsibility including clinical Director, clinical lead, surgical tutor, clinical governance lead as principal investigators of a number of clinical trials.

I have been published widely and have written over 100 articles, case reports, book chapters and other publications. Some of these can be found on PubMed.

Mr S. Tahir Hussain MS, FRCS (engl)

Consultant Vascular & Endovascular Surgeon West London Vascular & Interventional Centre, Northwick Park Hospital. Royal Brompton and Harefield NHS Trust Honorary Senior Lecturer Imperial College School of Medicine

Keynote Speaker

Medico-legal Implication in Vascular Ultrasound: the importance of getting the basics right including reporting to phraseology

Amir Bennett

Senior Lecturer in Ultrasound Education and Clinical Programme Director for Clinical Ultrasound at King's College London



I am the Module Lead for General Medical Ultrasound and Musculoskeletal Ultrasound. I am responsible for assessment for MSc Clinical Ultrasound programme, which includes both academic and clinical. In addition to responsibilities of overseeing the delivery of Clinical Ultrasound, I am member of Mitigating Circumstances Panel where I often Chair; ASB Chair for Clinical Ultrasound, member of School of Life Course & Population Sciences Panel; member of Academic Appeals and Administrations for Postgraduate Taught programmes and panel member of Women and Children's Health.

I am a practicing Sonographer for the NHS. I have a key role in running of ultrasound service providing specialist ultrasound scanning for liver and kidney transplant patients. I have a broad ultrasound skillset to undertake specialist ultrasound scans for a variety of examinations ranging from acute inpatients, paediatrics, musculoskeletal, general abdominal ultrasound, and gynaecology.

Also, I am a Trustee at Tunstall Jubilee Foundation – a not-for-profit children's charity.

Jackie Walton Lecture

Lymphoedema

Dr Kristiana Gordon

Consultant in Dermatology and Lymphovascular Medicine & Clinical Lead of the Lymphoedema Service St George's Hospital, London where her team care for thousands of patients with primary and secondary lymphoedema from across the UK



Prof Kristiana Gordon is a Consultant in Dermatology & Lymphovascular Medicine. She is Clinical Lead of the Lymphoedema Service at St George's Hospital in London, where her team cares for thousands of patients with lymphoedema and lipoedema. She is also a Foeldi-certified lymphoedema therapist.

Kristiana has completed a doctorate in the genetics of primary lymphoedema and imaging of the lymphatic system. She continues to pursue her research interests within the rapidly developing field of lymphovascular medicine and lipoedema.

Imaging of lymphatics during vascular scans what to report, when and how'

Ben Warner-Michel Kingston Hospital NHS Foundation Trust



Ben is a clinical specialist sonographer at Kingston Hospital, having originally trained as a vascular scientist at the Jackie Walton Vascular Studies Unit in Oxford before retraining as a general and obstetric sonographer, and subsequently becoming the clinical lead for ultrasound at Salford Royal Hospital.

Ben is currently the practice educator for vascular ultrasound at Kingston, a role that primarily focuses on training general and obstetric sonographers to perform vascular ultrasound examinations to a high clinical standard. Also, very passionate about education, Ben frequently gives talks to radiology and maternity departments on the proper application of Doppler imaging techniques in general and obstetric ultrasound examinations.

Thursday 28th November Programme

ANNUAL GENERAL MEETING 17:00-18:00

1.	Presidents Report	(verbal and book report)
2.	Professional Standards	(verbal report)
3.	Education Committee	(verbal report)
4.	Research Committee	(verbal report)
5.	Membership	(conference book report only)
6.	Treasurer	(conference book report only)
7.	BMUS Report	(conference book report only)
8.	Website Report	(conference book report only)

9. Q&A open session

President's Report

I would like to use this forum to thank our past president Emma Waldegrave for all her work throughout her tenure. One doesn't really appreciate the amount of work that goes on behind the scenes and Emma has set the bar so high that it is a hard act to follow. We thank you for your efforts and wish you well on your continuing career in vascular science.

I am honoured and pleased that I have managed to represent our society on various committees with the help and support of our energetic Executive Committee team. I can emphatically say that none of it would have been possible without the firm support of the board members.

Immense effort has gone into various projects in the background such as the new website, new online exam platform, updated PPGs, new financial payment platform, study days, research guidance, executive committee secretary, BMUS representative, membership secretary, newsletter and more. The full updates on all these projects are listed in the specific committee reports and recognition must be given to each committee chair and their respective teams for such an amazing amount of work, all completed in their own time. Please read the individual reports in this booklet so that you are aware of upcoming resources.

We have continued delivering face-to-face study days as it is in demand by our membership and mostly oversubscribed. I must say that I find these study days particularly useful to update and refresh my knowledge. We appreciate that it is difficult to get time off to attend these days and we have decided to continue with providing recordings of the talks for review as webinars through our website. A special thanks must go to Emma Robinson at BMUS for all her hard work and administrative support in the background.

Our Society has been involved in the updated Provision of Vascular Services 2024 document. The new document will be available for public access at the ASM and there will be stand on the main floor where you can have a look and possibly get a hard copy of this new document. I would like to thank all of the Executive Committee members for their input in the production of this document.

Our Society is once again represented at the BMUS ASM in Coventry this year on the Vascular Science stream with a series of topical lectures and invited speakers organised by our BMUS team lead (Tanyah Ewen). This is an excellent collaborative position that we intend to support in future years. We look forward to seeing you at this event.

We would also like to thank everyone who submitted information to the 2024 NHSE Stocktake. We appreciate the amount of work involved in the submission. This data is going to be used by the NHS to better understand the Physiological Sciences network that has long been overlooked. We shall keep you updated of the outcomes of this exercise.

Our Society has also had representation on many other panels and committees throughout the year such as AHCS (Academy of Healthcare Science), CASE (Consortium for the Accreditation of Sonographic Education), GIRFT (Get it Right First Time), the Vascular CAG (Clinical Advisory Group), NHSE Physiological Sciences Stocktake panel, and the VS open Council meetings. Updates on relevant points will be available in our quarterly newsletter.

We are also pleased to inform the membership that Klaus Bond has been voted in as the Vice President Elect. Klaus has been serving on the Executive Committee for some time and is well placed to take over the reins in due course. We wish him the best of luck. Our new Research Committee chair is Isaac Colliver, and we wish him well in his new role.

On a personal note, I would like to thank our Executive Committee for their unwavering support throughout my first year as the president of our new Society. All credit should go to the committee chairs and their teams. I am humbled by the sheer enthusiasm and knowledge within the combined team, and it is a blessing to be involved with this Society.

We wish you all a safe and prosperous new year.

Dr Kamran Modaresi BSc (Hons), PhD, AVS, FCVS

President - The College and Society for Clinical Vascular Science



On behalf of the Executive Committee:

Dr Steven Rogers (Vice President), Emma Waldegrave (Past President),

Klaus Bond (Vice President Elect and Conference Secretary), Jo Walker (Professional Standards Committee), Hannah Williamson (Education Committee), Tanyah Ewen (BMUS representative), Ben Freedman (Treasurer), Lynne McCrae (membership Secretary), Rob James (Website), Jeny Anton (Newsletter Editor), Isaac Colliver (Research Committee), Janine Fletcher (Executive Committee Secretary)

Professional Standards Report



Professional Standards Committee Report 2023-24

- Jo Walker, PSC Chair

We have had a great productive year for the PSC team, and have worked hard on a number of projects. This is an opportunity for me to thank the whole team for all the voluntary hard work they do for us as a whole membership. Our aim is to support both individual members and vascular services in professional development and practice.

We have completed the on-going schedule of PPG updates, including adding new guidance with regards to popliteal artery entrapment procedures, iliac Vein stents, and MALS and nutcracker guidance sections in the abdominal guides.

We have now published the Vascular Science workforce documents and guidance. This includes the 'Clinical Vascular Scientist Job Planning' document, which aims to help managers support our scientist roles in how we plan and provide clinical and non-clinical duties and activities. The Vascular science career pathway is defined from a Band 2 Vascular Assistant to a Band 8b-d Head of Service or Consultant Clinical Vascular Scientist roles. To accompany this defined career pathway we have produced Vascular Science specific Job Profile documents (Band 4 to 8b-d) to mirror the National Healthcare Science Job Profiles to enable easier job matching processes and understanding of expected competencies and duties. Alongside these we have provided example Job Descriptions for Bands 4 to 8b-d which may be used as templates or to assist with aligning your existing job descriptions with National professional body examples for conformity of practice. Note that any job description is specific to your role in under your employer, and this may differ significantly from the examples given. These examples are the standard expectations for the defined roles as per the Job Profiles.

CSVS are still very supportive of the IQIPS accreditation scheme, and this is also encouraged by CQC for all physiological services. Incidentally, all new Community Diagnostic Centres need to have all diagnostic and physiological services IQIPS or other appropriate accreditation within 2 years. With quality at the forefront, we have provided you with a 'Vascular Service Quality Management Recommendations' document, along with a template for a 'Vascular Service Quality manual'. As promised, to support your local quality assurance procedures we have provided 'Image and Report Audit Guidelines' and 'Equipment Quality Assurance' document. To enable services to work towards IQIPS V2.1 we have to take into account uncertainty of measurement for vascular diagnostics, and you can read about this in the new 'Uncertainty of Measurement' guideline.

Going forward we are keen to support NHSE with the national Vascular data submissions or 'stocktake' and although we may not be able to publish helpful guidance for service managers in time for this 2024 submission, we aim to look at supporting services with this in the future. You can contact us in the meantime if you are experiencing and difficulty with completion of this. This data collection fits alongside ensuring vascular services keep up with the NHS digital transformation goals, and the PSC will keep engagement with looking at National codes for vascular diagnostic tests.

As part of ongoing electronic staff record updates there has been a June 2024 release of the NHS Occupation Code Manual which replaces 'Healthcare Scientist' with 'Clinical Scientist'; however the Clinical Scientist coding requires HCPC registration. With this in mind, the membership may wish to consider the AHCS STP equivalence route to HCPC registration. We hope to finalise work with the Academy to enable agreed mapping of the CSVS AVS qualification to aid this process, and this work is ongoing.

We conclude this report by saying the biggest thanks to Alison Charig, who has now stepped down from the PSC committee after 10 years (a significant number of these as Chair and Co-Chair). Her knowledge and attention to detail is second to none, along with her passion for ensuring quality and safety - reflected in the hard work supporting and developing IQIPS on the Accreditation Committee Advisory Group on behalf of the CSVS. We will really miss her on our PSC team!

On behalf of the PSC team officers Eleanor Blaxland, Maria Morgan, Ved Ramnani, Nicholas Sanoudos, Janine Fletcher, Veronica Sagayarajah, and assistant officer Sivanusha Sivakumar

Any queries, comments or suggestions please email the Chair of the Professional Standards Committee: psc_chair@svtgbi.org.uk

Education Committee Report

The Committee:

2024 has seen a lot of activity for the Education Committee and everyone has been working enthusiastically to continue to provide great educational support to the CSVS membership. I would like to offer a huge thank you and my sincere gratitude to everyone on the education committee who so generously volunteer their time to help run the education side of the CSVS: Amy Bolsworth, Caroline Dainty, Rebecca Fulls, Sarah Green, Laura Haworth, Louis Alexander, Michael Davis, Shannon Halliwell, Ana Morais, Sophie McDermott, Xian Shen, Emma Togher and Alex Webb. As Rebecca Fulls, Ana Morais, Emma Togher and Alex Webb step away from the committee for the next year (we look forward to seeing you back in 2025), we extend a very warm welcome to their interim cover, Sophie Connolly and Julia Warne, and also to our new Trainee Rep, Max Bitterlin – we are so happy to have you join the team and are excited to work with you all over this coming year!

Theory Exams:

Our biggest change this year was to our theory exam provider which changed hands from Inteleos to Mettl in Spring. The theory exam team have worked tirelessly to implement the new exam system and successfully launched with Mettl in July 2024. The theory exam team are continuing to work closely with Mettl to monitor the new system and iron out any teething problems that a new system will inevitably generate. We look forward to continuing this successful new partnership into the new year. All information on how to register for and sit your theory exams can be found on the CSVS website. If you are having issues accessing the exams, please contact: technologyexams@svtgbi.org.uk or physicsexams@svtgbi.org.uk depending on the exam type you are seeking support for. Please note that the previously available email address, theoryexam@svtgbi.org.uk, has been discontinued and is no longer in use.

Practical Exams:

Last year you may have noticed a new feature in the newsletters – a big congratulations to all newly Accredited Vascular Scientists! This year, we are going one step further and congratulating all newly Accredited Vascular Scientists from 2024 during the Awards ceremonies at the ASM on Thursday 16:45 - 17:00. Please come along and congratulate your fellow colleagues!

We are always looking for volunteer assessors for the practical exams. If you want more information on being an external examiner or would like to ask any questions relating to the practical exams, please check out the education pages on the CSVS website or contact practicalexam@svtgbi.org.uk

Study Days:

The Fundamentals Study Day was held online on 21st March this year with fantastic feedback and comments allowing us to continue to deliver on the needs of the membership as they start their journey in vascular science.

Unfortunately, we were unable to hold the Revision Study Days this year due to the theory exam changeover however they will be back to normal in 2025 and we look forward to seeing you there! Look out for future communication of the date(s).

Finally, we saw a very successful Themed Study Day this year held at King's College Hospital on 27th September. The day focused on a multidisciplinary approach to vascular access, including presentations from guest speakers from vascular surgery, nephrology, and interventional radiology as well as vascular

ultrasound demonstrations and hands-on sessions where attendees could scan example patients first hand. We hope you had a great time!

For information regarding upcoming study days or to volunteer to lecture on these days (CPD available with expenses covered) please contact studydays@svtgbi.org.uk

CPD:

We are currently undergoing our annual audit of 10% of the membership with 30 members selected at random. If you have been selected for audit, please liaise with the CPD team with how to complete this process.

Please also ensure that your rolling total is 30 CPD points over 3 years by the end of each August. There have been 32 members this year who have been contacted for insufficient CPD points. Please liaise with the CPD team and Membership team if there are any concerns or queries relating to your points and membership.

If you are having difficulty obtaining points, please do not forget that online CPD questions are available including previous editions. The CPD team are also happy to suggest ideas for completing CPD which do not involve travelling to conferences etc. at cpd.avs@svtgbi.org.uk

Finally, I would again like to say a huge thank you to everyone sitting on the Education Committee. None of the work we do would be possible without the time and dedication of each of you.

Kind Regards,

Hannah Williamson Education Committee Chair

Research Committee Report

Research Education

Over the past year the Research Committee has continued to work hard on improving the CSVS's research education offering. The research webinar series concluded in March, with all six episodes available on demand via the research webpage. Meanwhile the research newsletter series, written to accompany and support the webinars, has continued with the 8th entry on Statistics included in the Autumn 2024 newsletter. If you're trying to get to grips with how to start your own research project, these resources should hopefully provide you with a starting point and breakdown the research process.

Finally, the Research Committee will be launching the Research Module Study Day with a trial session in late February. The study day has been designed as a 'hands on' session for those new to research or in need of a refresher - covering topics including critical appraisal, working with data, and how to seek funding and additional support. After this initial session, we plan to work with the Education Committee to integrate it into the annual CSVS study days.

Bitesize Research

Our Bitesize Research series have also featured in the CSVS quarterly newsletter, each one providing a brief critical appraisal of several vascular science research articles. We welcome you to write a Bitesize Research article on a topic of your choice; please get in touch with research@svtgbi.org.uk for support.

CSVS Research Grants

The Research / Innovation Award is available to support Vascular Scientists conducting small-scale studies such as pilot or feasibility studies, with the hope that larger grants will be applied for at a later date. There is a total of £10,000 available per year, with a maximum of £4,000 per award. This year we awarded funding from the Research / Innovation Award to four applicants, to a total of £9127. Congratulations and good luck to:

- Amy Harwood with her study on super-resolution imaging versus reference imaging in people undergoing surgical revascularisation for chronic limb threatening ischemia (CLTI)
- Max Bitterlin with his qualitative study on barriers for people with homelessness and intravenous drug use (IVDU) status in accessing vascular services for venous disease in Bristol
- Chloe Rai with her trial of electronic diagrammatic reporting within a vascular studies department
- Siobhan Trochowski with her retrospective audit and analysis of the Oxford University Hospitals carotid artery database

The Research Committee also offer a Grant Writing Award to support a short period of backfilling to provide Vascular Scientists with time away from clinical duties to write a research grant application. The award provides up to £500 for each successful applicant, with a simple one-page application form available on the CSVS website.

The next grant window will be agreed by the Research Committee in early November and announced at the AGM.

The Research Committee

Firstly I would like to thank Steve Rogers as our outgoing Chair. His wisdom and leadership has been invaluable and I wish him luck as he focuses fully on his role as Vice President. I would also like to thank Yvonne Sensier for her dedicated service as Grant Officer; Emily Morgan has kindly taken up the responsibility and I am exceptionally grateful for the work she has already put in this year. Finally I would like to thank all of the Research Committee for their commitment, hard work, and support. Ben Warner-Michel, Emily Morgan, Laura Scott, Nida Nadeem, Osian Llwyd, Siobhan Trochowski, Yvonne Sensier - I am exceptionally grateful for the time you volunteer and expertise you provide to make the CSVS's research offering possible.

As I take over as Research Committee Chair, I hope to continue the committee's work in fostering the research capability of the membership with the ambition to help secure protected research time for interested Vascular Scientists. If you have any questions, comments, or suggestions please get in touch via research@svtgbi.org.uk.

Isaac Colliver Research Committee Chair

Membership Report

Membership Report November 2024

Membership numbers as of October 29th 2024 are as follows.

Total:	518
Associate:	21
Honorary:	17
Ordinary:	185
Accredited Vascular Scientist:	295

This year we have had 34 new member registrations, including:

Modernising Scientific Careers Trainees:	8
AVS Trainees:	12
Other Trainees:	0
Non-Disclosed:	13
BSc Student:	1

As the SVT has now been re-launched as the CSVS – College and Society for Vascular Science – we are in the process of re-issuing every member with a new identifying membership number. Hopefully, this will be complete to coincide with the launch of the new website. Once complete, you will be informed via email and you will be asked to login and make a note of your new membership number. Each number will be preceded with either and F (Fellow for AVS members) or an M (Member for non AVS members).

Unfortunately, since we have changed the renewal process for membership, we are finding still, that there is an increased number of members for whom their membership is lapsing.

As always, if you have any issues regarding your membership, please contact the membership team who are always happy to help.

Treasury Report

The Society for Vascular Technology of Great Britain and Ireland t/a SVT

Receipts and Payments Account

For the Year Ending 31st August 2024

		31.08.2024		31.0	31.08.2023		
	Unrestricted	Restricted					
	Funds	Funds	Total	Funds	Total	Funds	
	£	£		£	£		
Receipts							
Annual General Meeting	10,192.61		10,	192.61	-		
Advertising	6,493.00		6,	493.00	6,000.00		
Charing Cross Symposium	3,970.00		3,	970.00	-		
Examination, revision and study day fees	9,270.00		9,	270.00	14,287.41		
Membership fees	25,983.38		25,	983.38	25,443.46		
Miscellaneous income	1,231.27		1,	231.27	-		
Bank interest received	1,905.56		1,	905.56	1,2	34.07	
Total receipts	59,045.82	-	59,	045.82	46,964.94		
Payments							
Charing Cross Symposium	1,563.01		1,	563.01		-	
Networking/social event	554.91			554.91	1,725.59		
Annual General Meeting	10,215.04		10,215.04		6,787.86		
Ann Donald memorial award	1,250.00		1,	250.00	1,3	1,350.00	
Administration and marketing support	14,025.68		14,	025.68	8,6	26.51	
Education committee meetings	3,980.08		З,	980.08	1,5	66.53	
Journal access	2,845.00		2,	845.00	2,7	46.14	
Executive committee	4,426.73		4,	426.73	8,7	19.59	
Professional standards committee	1,988.80		1,	988.80	1,5	16.93	
Research committee	686.29			686.29	8	57.82	
CASE expenses	1,905.00		1,	905.00	1,8	35.00	
Revision and study days	868.59			868.59	5,9	64.56	
Practical examination fees	7,417.70		7,	417.70	294.38		
Postage, printing, stationery and software	565.76			565.76	407.05		
Website / database administration	1,612.80		1,612.80		3,2	90.12	
Insurance	805.98			805.98	739.98		
Professional fees	4,050.00		4,	050.00	3,0	64.00	
Miscellaneous expenses	451.19			451.19	1,1	24.72	
Sponsored research grants	1,701.60		1,	701.60		-	
IT Software & Consumables	3,383.18		3,	3,383.18 2,670.57			
Bank charges	3,331.15		3,	331.15	2,7	69.80	
Total payments	67,628.49	67,628.49 56		56,0	57.15		
Net of payments	(8,582.67)		(8,	582.67)	(9,0	92.21)	
Cash funds last year end	148,825.17	3,000.00	151,	825.17	160,9	17.38	
Cash funds this year end	140,242.50	3,000.00	00.00 143,242.50 151,825.17		25.17		

BMUS Report

BMUS»)

It has been another busy year for BMUS:

BMUS has set up the Preceptorship Endorsement Scheme, which is a simple scheme that aims to recognise departments that are able to offer a supportive environment for ultrasound practitioners of all grades and experience. By aligning with principles set out in the BMUS Preceptorship and Capability Framework for Sonographers, the scheme provides departments with a useful checklist of essential and desirable criteria associated with best practice and equitable staff management. It helps managers and ultrasound leads identify how well they are supporting staff and highlights areas where they may be able to improve.

The following Ultrasound Departments have gained the BMUS Certificate of Endorsement

- Guy's and St Thomas' NHS Foundation Trust,
- The James Paget University Hospitals NHS Foundation Trust
- Worcestershire Acute Hospitals NHS Trust
- Hull University Hospitals NHS Trust
- Barking, Havering and Redbridge University Hospitals NHS Trust
- Mid Yorkshire Hospitals NHS Trust
- The Countess of Chester Hospital NHS Foundation Trust
- Newham General Hospital
- Frimley Health NHS Foundation Trust
- The Royal London Hospital Barts NHS Trust
- Whipps Cross Hospital
- Maidstone and Tunbridge Wells NHS Trust
- North Cumbria Integrated Care
- Liverpool Womens Hospital

Many congratulations to the Ultrasound Departments at these Trusts, which have met the BMUS criteria for providing a working environment that meets the needs of staff of all grades.

This year BMUS has provided some new guidelines:

- Hepatocellular Carcinoma Surveillance Minimum Standards August 2024
- Hepatocellular Carcinoma: Delivering Quality Ultrasound Surveillance August 2024
- Guidelines for the Interpretation and Reporting of Diagnostic Ultrasound Scanning in Softtissue Masses – September 2024
- Paediatric Neck Lump Guidelines September 2024
- Recruitment of Sonographers Without a CASE Accredited Award: Guidance for Employers - September 2024
- Recruiting International Sonographers and Those Without a CASE Accredited Award September 2024

Annual Scientific Meeting:

This year's meeting will be held at Coventry Building Society Arena 10th – 12th December 2024. This is the 55th Annual Scientific Meeting. There is a full and varied programme covering all aspects of ultrasound in the form of presentations and hands on workshops.

Vascular imaging is obviously a very important component of the annual meeting, and there are two full lecture-based vascular sessions scheduled for the second day. This year we have decided to not run a hands-on workshop due to poor attendance in 2024.

The theme the conference this year has the strap line "**working together for better services**". We are hoping the theme will be used to influence the content of each stream in that we aim to give sonographers more advanced, rounded knowledge – not just ultrasound.

I would like to thank everyone who has agreed to present at this year's meeting. Without your support this event would not be possible.

The main vascular session is on Wednesday 11th December. Vascular scientists interact with multiple services, including renal medicine, stroke medicine, rheumatology, diabetic services, orthopaedics and paediatrics. The role of vascular ultrasound within these modalities is essential in the diagnosis and treatment of various disease processes.

The session will look at the role of vascular ultrasound in assessing renal transplant, giant cell arteritis, paediatric transcranial duplex for sickle cell disease, exercise therapy and post non-surgical venous treatment appearances. The first session will include the following presentations:

- Carotid duplex: Technique and Pitfalls
- Transplant Kidney
- Post Radiofrequency Ablation Appearances
- Exercise Programmes

The second session will include the following presentations:

- Sickle Cell Transcranial Doppler
- Giant Cell Arteritis Duplex
- Diagnosing Thoracic Outlet Syndrome During an Upper Limb DVT Scan
- Vascular Surgery in the Forces

I would also like to take this opportunity to thank Prof Adrian Lim, Dr Peter Cantin, Joy Whyte and the wider BMUS council for their continued support professionally and administratively of the SVT. I would also like to thank Emma Tucker "BMUS Operations and Development Manager" for her continued support and advice.

2025 will see Dr Peter Cantin take over the reins as BMUS president from Prof Adrian Lim.

Website Secretary Report

Website update:

- The new website launch has been scheduled.
 - o Improved homepage of the website.
 - o Improved functionality and navigation around the website.

Social Media update:

- Social media channels are currently being managed by Emma Robinson (SVT Content Creator)
- The number of social media posts have been significantly increased to try to gain more exposure for the society.

General:

• There is a plan to develop a Website/Communications team that will incorporate a new voluntary Social Media role.

