



THE SOCIETY FOR VASCULAR TECHNOLOGY OF GREAT BRITAIN AND IRELAND



In this Issue.

- President's Welcome
- SVT Research Series
- ASM update
- Fundamentals of Ultrasound Study Days
- Grant and funding applications
- Venous Speciality Interest Group
- SVT Fundraising
- CX 2022 Registration
- Top tips for preventing RSI

SVT Presidents Welcome

Happy New Year and welcome to the SVT Winter Newsletter 2022!

As 2022 gets underway we have launched a new SVT Newsletter via Mailchimp, delivered straight to your email inboxes. We will continue to store a downloadable pdf version of the Newsletter on the website under Newsletter - Past issues.

I would like start by thanking you all for attending the Vascular Societies ASM in Manchester. It was an outstanding meeting full of prime content, and our first face to face meeting since Covid-19.

My immense thanks go to our committee members who worked tirelessly on the meeting design and content right through to chairing and volunteering on the day to ensure its success.

I want to congratulate again our ASM Award winners for their salient contribution to the meeting, you are an inspiration to our membership, and we wish you every success in your future career. Within this issue we have an ASM review, where you can read about conference activities and see our SVT Awardees.

My sincerest gratitude goes to Lee Smith, now past President of the SVT, for all his hard work throughout his presidency, especially given the difficult landscape of the pandemic. Lee has worked for the SVT for many years and was integral in the design and development of the SVT website. He will be missed by all, and we wish him every success in his future.

It has been a busy start to my presidency, and I am thoroughly enjoying participating and engaging with our allied societies, councils and committees to represent our collective voice. It is truly an honour and I feel very privileged to be able to represent our society. Post Covid-19 recovery is high on everyone's agenda and there is much work taking place within NHS England and Improvement off the back of Sir Mike Richards report on Diagnostics recovery and renewal.

Physiological measurements, within the wider

Diagnostic services, is less well represented in regard data reporting, and a task force has been created to address this. The Physiological Measurement Program will be creating a data collection workbook for Vascular Physiology and has engaged the SVT to input on this project. Once completed, this workbook will be used to gather data from all vascular physiology services in England to gain insights into service design, current waiting times, workforce data and much more.

The program aims to improve quality and efficiency of physiological measurement services, to build governance structures to support networks and clinical service transformation and improved diagnostics capacity to deliver high quality patient care and outcomes consistently across all NHS providers.

I am delighted to announce the launch of the SVT Equivalence Award funding for AVS members, the details of which are within this newsletter and posted on our website. The winning applicant(s) work will be published in the Spring Newsletter, and we are very much looking forward to receiving many applications!

I look forward to working with all committees of the SVT to ensure our profession's voice is well represented in the science community and at national level.

As always, we would invite you to become more involved with the SVT, we have four committees and are always looking for new volunteers. Please do not hesitate to get in touch to discuss with Committee chairs.

Our new Contact us page allows you to communicate directly with each committee.

Kindest Regards
Emma Waldegrave
SVT President



SVT Research Series

The Research Committee put together the Research Workshop at ASM in Manchester in December 2021. We hope that those of you were able to attend found it useful and inspired to undertake research.



Following on from the workshop we would like to present a regular research series for the SVT Newsletter to cover all aspects of research process. We will provide information and links to find more information on the web. There is more information on the Research pages of the SVT website, and we can be contacted on research@svtgb.org.uk. If you have a topic that you would like us to cover, then please also contact us.

The SVT Research Grants window is now open and closes 13th March 2022. A maximum of £4000 is available for small research projects and more details can be found at <https://www.svtgb.org.uk/research/svt-grant-application>

Richard Simpson
SVT Research Committee - Chair

A Roadmap to Research

The first part of this series will give a brief overview of the research process and the steps needed to get from formulating the question to dissemination of the results.



Figure 1. Overview of the research process.

Identify and define the research question

As clinicians we are experts in caring for patients with vascular disease along with their other co-existing conditions. We should strive to use the best evidence to inform our professional practice and aim to continually improve our patient care.

However, there are many questions that we can generate from our practice, including “How can we do this better?”; “How good is our current practice?”; “Does it meet the standards set?”. These questions broadly fit into 1) Research; 2) Service Evaluation; or 3) Clinical Audit. It is important to decide what category your study or project fits into, as that will have implications on its design, data collection and governance. Link at hra-decisiontools.org.uk/research.

Literature Review

The next step in the research process is to determine what is already known and where the current gaps are in the knowledgebase. This can be carried out in an informal manner by a quick informal literature review, by searching keywords in a search engine, e.g., PubMed.

A formal Systematic Review follows a much more structured manner. It is designed to be robust and reproducible to ensure the minimisation of bias from the literature review process. The stages include: 1) Framing questions for a review; 2) Identifying relevant work; 3) Assessing the quality of studies; 4) Summarising the evidence; 5) Interpreting the findings.

When the literature review has been carried out and the papers, conference proceedings, etc. have been selected, then it is important to critically appraise the published research.

- Does this study address a clearly focused question?
- Did the study use valid methods to address this question?
- Are the valid results of this study important?
- Are these valid, important results applicable to my patient or population?

Formulate the research question and hypothesis

After the literature review has been conducted it is time to formulate the research question and if appropriate a hypothesis. These will define exactly what you intend to research about your topic. Without a strong research question, you should not expect to develop a strong research answer. Research questions tend to be more open-ended, while hypotheses are more direct, focused and closed.

A research question is a concise and focused question that provides a clear base for the research. It is more often used in exploratory studies, where the relationships

between the variables are more uncertain. It doesn't make a statement on if relationships exist between the variables. One way to construct a well-built question is to use the PICO model: Population; Intervention; Control; Outcome. This enables the researcher to construct a question that is specific to the patient population concerned, to include the new intervention or diagnostic test and an appropriate comparator. It is also important to carefully consider the most suitable outcome to be measured.

A hypothesis is a formal statement about the relationship between two or more variables. It is most appropriate for experimental studies and when there is a large body of evidence that provides information of how the variables of concern interact.

Study Design

There are many ways to carry out a research project as can be seen in Figure 2.

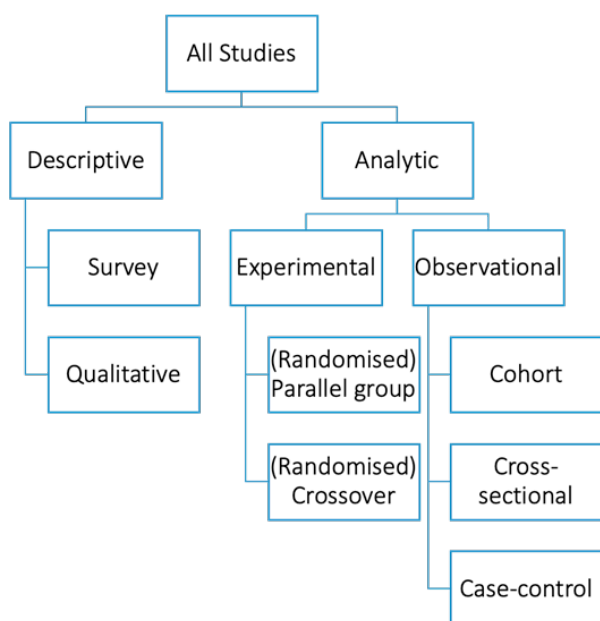


Figure 2. Tree of different study designs.

The study design will be influenced by the research question including primary outcome variable chosen. A descriptive study aims to describe what is happening in a population (e.g. the prevalence, incidence or experience of a group). An analytic study attempts to quantify the relationship between two factors (an intervention or exposure and the outcome). Experimental studies manipulate the intervention or exposure and compares to the outcome between the groups (parallel or crossover design). In observational studies, the researcher measures the intervention or exposure that occurs normally and then records the outcome (cohort - over a period of time or cross-sectional - at one time point)

The sample size of a study is the number of observations or patients recruited to a study. It is an important feature of any study in which the goal is to make inferences about a population from a sample. It can be a balance between higher precision and narrow confidence intervals afforded by a large sample size and the minimum number of observations/recruits needed to be able to answer the research question.

It is important to get the sample size right as it's unethical to recruit too many participants than needed. It is also

unethical to recruit too few and not be able to reach a properly powered conclusion, due to wide confidence intervals and the risk of errors in statistical hypothesis testing.

Samples size calculation usually requires the expertise of a statistician, as it involves assessing the data from the literature of previous pilot studies to calculate the exact number needed. A sample size for a pilot or feasibility study can be much smaller and estimated from experience rather than calculated.

An important aspect of study design is to take account of the opinions of patients and public that have experience of the disease being studied. Patient and Public Involvement (PPI) should be an integral part of the research as this group can offer new insights to the treatments or diagnostic regime being investigated. It is obvious that patients are recruited as participants of a study, but they can act as reviewers, help protocol development and if appropriate be co-investigators. PPI is also a requirement for ethical review and often for funding opportunities.

Funding

All research needs to be funded, as even at the most basic level there are costs associated with carrying out additional data collection and analysis. These costs may be met by the host department, on an ad-hoc basis, as part of a clinical role or as part of STP training. However, larger research studies or more exploratory studies require external funding due to their complex nature. Funding is available from a variety of sources, such as Trust/ Institutional funding calls, charities or professional bodies (including the SVT), NIHR, UK research councils.

The SVT offers Research Grants of up to £4000 per project to both ordinary members and special interest groups. The Research/Innovation award is to enable Vascular Scientists to conduct 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.

For more information see <https://www.svtgbi.org.uk/research/svt-grant-application> or email Yvonne Sensier - grants@svtgbi.org.uk

Research Governance and Approvals

A study protocol is the plan or set of steps to be followed for the duration of the study. It details the rationale for the study, the hypotheses, the outcome measures, the plan for participant identification and recruitment and the statistical analysis plan. It also details the governance arrangements in place to ensure the study is safe.

Research governance can be defined as a broad range of regulations, principles and standards of good practice that exist to achieve and continuously improve research quality across all aspects of healthcare. It is needed to safeguard participants, protect researchers, enhance ethical and scientific quality, minimise risk, monitor and promote good research practice.

Trust/Institutional Research and Development departments must be consulted early in the research process, to ensure the appropriate research governance agreements are in place before the research commences. They will be able to

advice on sponsorship and to carry out capacity, capability and risk assessments. A sponsor is the organisation that takes on overall responsibility for proportionate, effective arrangements being in place to set up, run and report a research project.

All research participants (with very limited exceptions) need to provide Informed consent to take part in research. This must be carried out by a trained member of the research team and usually includes issuing a Patient Information Sheet (PIS).

To gain the appropriate approvals you will need to access the HRA website (hra.nhs.uk). It is an NHS website and provides a wealth of information on the research planning and approvals that are needed to carry out a research project in the within the NHS. The Integrated Research Application system (IRAS) is found at www.myresearchproject.org.uk. Normally for a research study you would need approvals from the HRA, a Research Ethics Committee and your local Trust/Institution R&D department. Depending on your research, you may also need MHRA approval or the Human Tissue Authority.

Good Clinical Practice (GCP) is the international ethical, scientific and practical standard to which all clinical research is conducted. It is important that everyone involved in research is trained or appropriately experienced to perform the specific tasks they are being asked to undertake. The NIHR offers GCP training at www.learn.nihr.ac.uk and it's important to keep up to date by renewing every 2 years.

Data Capture and Analysis

When the study has been approved and the green light given it is time for patient recruitment. Then the next stage of the research process is to collect the data stated in the protocol. This is done at baseline and then every follow-up visit after that.

Data can be collected in a variety of ways, including specific research activities (demographics, clinical examination/measurements, scans, tests, questionnaires) or data can be collected from usual clinical activities. Obviously, these will be study specific and must be justified. Data can be collected by using case-report forms (CRFs) that are specifically designed for the research study being undertaken and can be paper or electronic. It is then stored in a database or spreadsheet for data analysis.

Useful websites and information

nihr.ac.uk – which includes a glossary, details on the Research Design Service, a list of Funding opportunities, and several modules on Learning for research including GCP, PI and Informed Consent training.

hra.nhs.uk – is an NHS website and provides a wealth of information on the research planning and approvals that are needed to carry out a research project in the within the NHS.

Integrated Research Application system (IRAS) – is found at www.myresearchproject.org.uk

ct-toolkit.ac.uk – is a very detailed roadmap for the stages of the research process. It is aimed at those undertaking drug trials (Clinical Trials of Investigational Medicinal Products - CTIMPs), but there is a wide range of information that is useful for everyone involved in research.

R&D Department - Your R&D department is a wealth of knowledge and expertise. You should engage with them very early on in the research process.

Good Scientific Practice (GCP) - All researchers need to have GCP training and training modules can be found at www.learn.nihr.ac.uk.

Chief Investigator (CI)/Principal Investigator (PI) - The chief investigator (CI) is the person who takes overall responsibility for the design, conduct and reporting of a study. The principal investigator is the person at each site who is responsible for the day to day running of the research project. In a single site study they are the same person.

It is very important to complete as many of the data points as possible, as missing data can hamper the data analysis and possibly render the results meaningless. More complex study designs and increased patient visits, can lead to an increase in the chance of missing data. Another consideration is how image data e.g. duplex scans, CT or MRIs will be anonymised, transferred and stored and this must be explained in the protocol and the ethics forms.

When all the data has been collected then data analysis can be carried out, which can include the analysis of the raw data or sample, such as image analysis or biochemical analysis. The next step is statistical analysis, where the aim is to describe the study sample (descriptive stats – age, sex, BMI, etc.) and to test for differences between the groups (t-test, chi-squared test, etc.). Depending on the study design it can also feature correlation and/or regression analysis as well as survival analysis, amongst others. Basic statistics can be done by a trained researcher but more advanced methods (especially for larger studies) should be done by or under the supervision of a statistician. It is important to follow the statistical plan that was set out in the protocol as any ad-hoc analysis can be underpowered, leading to significant errors and incorrect interpretation.

Dissemination

When the data has been analysed and interpreted it is important to disseminate this findings and limitations of the study to the public and professionals. This is to ensure new findings are available in the literature and can be evaluated by relevant peer groups. It also enables the implementation of research findings into practice (with the involvement of commissioners) or guidelines (such as NICE). The format of the report will be different for each method. However, it is essential to include the background, hypothesis/rationale, methods, results and discussion and conclusion.

Dissemination can involve presenting at local research or MDT meetings, submission to conferences (such as the SVT ASM) as posters or presentations and by publication in a peer-reviewed journal.

It is also important to inform research participants of research findings with a lay summary and/or a copy of the journal article.

Clinical Trial Units - Specialist units with a specific remit to design, conduct, analyse and publish clinical trials and other well-designed studies.

Clinical Trial Manager - the person who is responsible for the day to day running of a trial.

Clinical Research Practitioner - a patient facing member of the research delivery team.

National Institute of Health Research (NIHR) - a government agency which funds research into health and care and it is the largest national clinical research funder in Europe. NHS Research Scotland and Health and Care Research Wales are the equivalent in Scotland and Wales respectively.

Clinical Research Network (CRN) - supports patients, the public and health and care organisations to participate in high-quality research. The CRN comprises 15 Local Clinical Research Networks across England.

Research Design Service (RDS) - provides support to health and social care researchers on all aspects of the research process in England.

Research Ethics Committee (REC) – these committees exist to protect the rights, safety, dignity and well-being of research participants and to facilitate and promote ethical research that is of potential benefit to participants, science and society. They are made up of groups of volunteer members (lay and specialist) that review studies and provide ethical advice and approvals.

SVT Annual Scientific Meeting 2021 A Review by Anam Akhtar AVS



As a regular attendee of the SVT -Annual Scientific Meeting (ASM), I was really looking forward to the AGM this year, particularly since the previous year's had to be cancelled due to Covid-19.

First and foremost, it was particularly refreshing to move away from our unnatural and isolated lifestyle. The extraordinary impact associated with the emergence of Covid-19, introduced an array of challenges; yet another difficult year of social distancing, communication facilitated by technology, permanent face coverings and not to forget all the clinical strains we faced.



The First day of the conference started with the Research skills and Methods Workshop. I particularly liked the fact the event was held over three days, with a focused session dedicated to research and education. I have long found, despite the encouragement from the committee and training schools towards research, it remains a daunting prospect for many; mostly due to the lack of experience, understanding and knowledge of clinical application; Not to forget the potential void it creates when undertaking STP equivalence.

The Research workshop was an excellent introduction into the programme, educating members and breaking the process down into smaller steps; from identifying key concepts, data collection/database selection, results, search strategies to funding and regulating research.

Dr Steven Rogers and Dr Beth Harris provided an informative talk on the pre-requisites for undertaking research, as well as the 'Good Clinical Practise' course by NIHR and the funding available for vascular scientists, this was certainly of note and now has been encouraged further in our team meetings.

I would love to see the research workshops continue to provide such educational content, However, I feel data analysis and statistical application, can often pose as the stumbling block within research, particularly amongst individuals with zero or little experience, therefore it may be useful to incorporate an introductory interactive workshop in smaller groups at the ASM, where members would be able to use test data to analyse using the appropriate statistical software's, consequently guiding them to properly characterize, summarize, present and interpret results.

The afternoon commenced with eight trainee MSc research proposals, all of which were delivered superbly with studies relevant to our clinical practice.

The presentations regarding the evaluation of the GCA diagnostic pathways, the effectiveness of CEUS compared to CTA and Duplex and the health literacy study by Sophie Bowen, David Machin and Chloe Bishop respectively, were interesting and contemplative, since these were current topics being reviewed in our department.

This year I decided to rotate between the different charter

rooms and the main hall. This certainly proved a difficult decision, deciding which session to attend and which to pass, but I finally decided to spend some time in the main hall, where I witnessed an impressive turnout. The oral abstracts were indeed fascinating especially since they provided a wholesome insight into vascular medicine from a more surgical perspective.

My personal highlight of this session was a particularly motivating and thought-provoking talk on a sensitive topic regarding the push for widening participation in medicine from BAME backgrounds and the difficulties they currently face in the workplace. This topic appeared to resonate with some individuals as well as spread awareness which resulted in multiple offers of support towards the cause and foundation.



After a walk around the exhibition hall and meeting old colleagues and acquaintances, I returned to the SVT charter room to attend an extremely educational session; the joint VASBI-SVTGBI session, teaching us about the success and methodology of endo-AVF procedures as well as the importance of accurate venous and arterial mapping when using the WavelinQ™ and Ellipsys® systems.

Day two started with the research project abstracts by newly qualified vascular scientists, where we heard some brilliant abstracts. Award winning presentations by Dr Osian Llwyd (Newly qualified vascular scientist) on “The feasibility of assessing cerebrovascular reactivity with carotid duplex ultrasound” and Dr Nazia Saeed’s (Senior Clinical Vascular Scientist) on “Carotid Webb; Missed on duplex” both were articulated excellently with good scientific content and particularly extraordinary Carotid Webb images were illustrated in the latter talk.

There were three sessions I was particularly looking forward to;



The Great Debate – “Should Vascular Ultrasound only be performed by experienced vascular scientists”, The personal “experience of a vascular surgeon and a bilateral lower limb amputee” by Mr Neil Hopper and finally the Jackie Walton Lecture on the “The role of an interventional vascular scientist in venous procedures” by Gurdeep Jandu.

All three were delivered exceptionally well and were thoroughly enjoyable and thought provoking indeed. I enjoyed the light-hearted approach taken for a debate on a contentious subject, with valid points delivered by the ‘For’ and ‘Against’ party, consequently leaving me more undecided than before.

The personal account by Mr. Hopper was eye-opening at the least, as he described his experience on the other side of the knife and spoke of the lack of after care and support emotionally, physically and socially, post procedure. Mr. Hopper’s journey was truly inspiring as he walked us through his journey back into resuming work as a Vascular surgeon and how shifting perspective can enable us to enhance the care we provide. Finally, the Jackie Walton lecture was motivating and aspiring, as it demonstrated long overdue advanced development opportunities for vascular scientist, as well as a cost-effective method for the NHS to reduce waiting lists.

The day concluded with the Annual General Meeting and SVT Education Committee Report running simultaneously, ending the afternoon with the award presentation.



The evening formal dinner and drinks reception held at the Manchester Convention centre, was a delightful opportunity to dress up and celebrate the achievements within vascular, as well as network with other vascular practitioners across the country. A glamorous evening with a three-course meal, live band and dancing certainly brought the conference to a great close.

Overall, I found the ASM this year was a great success, and the content was certainly engaging and educational for scientists of all stages. I look forward to next year's AGM in Brighton.

SVT ASM AWARD WINNERS!



Research Proposal

Miss Chloe Bishop
Trainee Vascular Scientist
Newcastle upon Tyne Hospitals NHS FT
[Read full abstract](#)



Best Scientific Presentation

Dr Nasia Saeed
Clinical Vascular Scientist
Oxford University Hospitals NHS Foundation Trust
[Read full abstract](#)



Best Completed Research

Recently qualified scientist
Dr Osian Llwyd
Clinical Vascular Scientist
Oxford University Hospitals NHS Foundation Trust
[Read full abstract](#)



Ann Donald - Scientist of the Year Award

Gurdeep Jandu
Interventional Vascular Scientist & Operations Manager –
My Vein Clinic
Senior Clinical Vascular Scientist at IVS
[Read full abstract](#)

FUNDAMENTALS OF VASCULAR ULTRASOUND (VIRTUAL)

28th February and 1st March 2022

MONDAY 28th February

09.00-9.15	Registration and welcome
9.15-10.15	Basic ultrasound physics : Jeny Anton (AVS)
10.15-11.15	Doppler physics : Carl Tiivas (AVS)
11.15-11.30	Break
11.30-12.30	Haemodynamics : Matt Bartlett (AVS)
12.30-13.30	Physics Q&A : Matt Bartlett (AVS)

TUESDAY 1st March

09.00-9.30	Arterial Disease and Interventions : Miss S Sayed, Consultant Vascular Surgeon
9.30-10.00	Venous Disease and Interventions : Miss S Sayed, Consultant Vascular Surgeon
10.00-11.00	Peripheral arterial duplex scanning : Asif Dilshad (AVS)
11.00-11.15	Break
11.15-12.15	Carotid artery duplex scanning: Isaac Colliver (AVS)
12.15-13.15	Peripheral vein duplex scanning : Michael Davis (AVS)

STP EQUIVALENCE FUNDING - SVTGBI Application for Equivalence Award Funding 11th Feb 2022

The SVTGBI will make four awards of £350 per year to support AVS accredited members to apply for Academy of Healthcare Science (AHCS) equivalence to become a Clinical Scientist on the Healthcare Professions Council (HCPC) register.

To apply for this funding each applicant will prepare a piece of original work for submission to the Newsletter. This article submission of your original work could be research, audit, departmental quality improvement project or a case study.

Newsletter submissions will be scored by a review panel made up of member(s) from all four committees of the SVT; Executive, Education, Research and Professional Standards, and the award will be given to the highest scoring applicant(s). If a candidate is unsuccessful in achieving the SVTGBI funding, they may wish to apply again in the future.

The applicant must ensure they meet eligibility criteria set by the AHCS for equivalence prior to applying for this funding for Equivalence Application for funding and must have current paid membership as an AVS member.

<https://www.ahcs.ac.uk/equivalence/equivalence-guidance/>

Please carefully read the further qualifying details for this Award application listed below.

To qualify for the award applicants:

- Must be on the Clinical Physiologist register
- Must meet the criteria for AHCS equivalence
- Must submit a cover letter and CV to SVTGBI
- Must submit research/audit/case study, (2,000-word limit) to the SVTGBI Newsletter

Submissions to be emailed to Newsletter@svtgbi.org.uk by 5pm Wednesday 16th March 2022. Winner(s) of the award will be notified 4th of April.

The successful applicant(s) work submission will be published in the Spring Newsletter, circa 13th April 22.

SVT Grant Application

The SVT Research Committee is pleased to announce the 2022 SVT Research grants window, which are open to both ordinary and special interest groups.

The Research/Innovation award is to enable Vascular Scientists to conduct 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. We operate a top down funding approach, so the best

applications will get the full amount and so on.

Application forms and guidance can be seen below.

Please email Yvonne Sensier - Grants Secretary with any questions and to submit the application forms.
Email: grants@svtgbi.org.uk

Deadline: Thursday 31st March 2022

Venous Special Interest Group Pitching Event

VENOUS  **VASCULAR SOCIETY**
Specialty Interest Group
Research & Development Meeting

We are looking to support existing and new researchers to develop their own projects based upon addressing these research priorities.

Are you interested in Venous Research?

The Vascular Society Venous Specialty Interest Group has recently completed a James Lind Alliance Priority Setting exercise, which identified **the top research priorities** in the field of venous related conditions in the UK.

The next step is to support and grow these research priorities into research projects. We are hosting a virtual research event to discuss support of current projects in development, and to develop projects for the future.

15TH MARCH 2022, 14.00-16.00 Online via Zoom

If you have an idea for a research project or a venous project in development, please send us a brief 200 word abstract (contact link below) by **26th Feb 2022, 17:00** and present a summary of your proposed research on the day, along with any support you are looking for from the SIG.

Please come along...

- **If you have lived experience of venous disease and want to help shape and perform future research**
- **If you are a healthcare professional with an interest in venous research**
- **If you have little experience of research but are keen to find out more and get involved**

The Research Development Meeting is open to the public, all healthcare professionals, students, and trainees. To register, please complete a short interest form [here](#) or contact judith.long3@nhs.net

SVT Fundraising



The vascular studies unit (VSU) at Addenbrookes hospital are running the Cambridge half marathon in aid of Annabelle's challenge, a charity in support of patients and their families affected by Vascular Ehlers-Danlos Syndrome (Vascular EDS).

We were asked to run by a lovely patient, Clare, who we have got to know well during her visits to the department.

Vascular EDS is a rare disorder and as such often leads to complicated and challenging patient experiences like Clare's. As such we want to help raise awareness for this condition.

Clare has written a piece about her experience of Vascular EDS; with her permission some excerpts from this are attached below.

'Before my first major vascular episode, I believed that my greatest challenge in an acute medical event would be to make sure that the doctor knew I had a diagnosis of VASCULAR (not hypermobility) EDS, and therefore at risk

of vascular complications and hollow organ rupture. I soon learned that it is far more complicated. Following several difficult experiences in A&E, I think I finally understand the main problems. I wish I had understood these specific issues before I had my first aneurysm, rather than just having a broader expectation that I would face problems because the condition is rare...

A large proportion of a doctors' knowledge will depend upon their clinical experience, which will be different for each individual. A doctor explained to me what he called the 'unknown, unknowns': There are things he knows that he knows, and there are things he knows he doesn't know. But then there are the things he doesn't know that he doesn't know. VEDS frequently falls into this category...

As a patient, my advice is never to rely solely on the expectation that your symptoms will be investigated if you feel in severe pain. But I have learned that for me, severe pain (however it is perceived by a doctor) has always been a crucial indicator of a serious vascular complication. Experience has made one thing very clear to me, and that is that a VEDS patient in severe pain should not be discharged from A&E. Even if investigations indicate that there is no major vascular event occurring, because presentation of complications in VEDS patients can be subtle and unusual. Senior and specialist advice must be sought under these circumstances.'

For the full article please follow the link: <https://www.annabelleschallenge.org/clares-story>

Any donations would be greatly appreciated for this group of patients who by no fault of their own, suffer a significantly shortened and more difficult life. We are the rare health care professionals who spend the majority of time with this uncommon patient group and get to hear their stories therefore hopefully, we are more aware than most how impactful this condition can be.

If you would like to sponsor us and Annabelle's challenge you can find our Just Giving page at: www.justgiving.com/fundraising/vsuforac

Happy new year!

Isy, Ryan, Harry, Laura & Matt

THE LONDON MARATHON 2022



The Virgin Money London Marathon is the largest annual fund raising event – runners have raised more than £1 billion for good causes since the race began in 1981.

London Marathon's 2022 event is planned to go ahead Sunday, 24th April 2022. If you want to run for the Circulation Foundation then please register your interest by emailing info@circulationfoundation.org.uk

Thank you once again and if you do require any further information please contact info@circulationfoundation.org.uk



RSI working in Vascular Ultrasound

A pain in the neck, arm or wrist...

Working in Vascular Ultrasound can be particularly hard on the body and in order to prevent injury as best we can, Clinical Vascular Scientists and Sonographers should ensure they stretch and strengthen their upper and lower bodies.



Personal exercise program - Stretch

Denham Osteopathy, 7 St Francis Road, UB9 5JS, Denham Green, Bucks

All exercises should be approached with caution and not used for any undiagnosed pain.



Lateral Trunk and Shoulder Stretch

- Lateral Trunk and Shoulder Stretch
- Sit up straight and take one hand behind your head with your elbow pointing upwards.
- Using your other hand, gently press the elbow further back and bend your upper body to the side until you feel a stretch along your side.
- Hold 20 seconds. Repeat 3 times

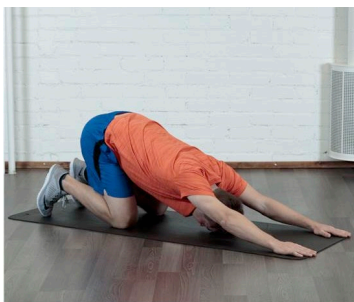
[Click here for video](#)



Trapezius Stretch

- Stand and take one hand behind your back to grasp the wrist with your other hand.
- Gently bend your head to the side and feel a stretch in your neck.
- Hold for 20 seconds. Repeat 3 times

[Click here for video](#)



Child's Pose

- Start on your hands and knees.
- Move backwards, bringing your buttocks towards your heels, lower your chest towards the floor. Hold the position for a moment, while breathing smoothly. Return to the starting position.
- Hold for 20 seconds. Repeat 3 times

[Click here for video](#)



Doorway Stretch

- Stand with one hand and upper arm against the corner of a wall or edge of a doorway.
- Turn your trunk away from the arm so that you feel a stretch in your chest muscles.
- Note: Stop if you feel tingling or numbness in your fingers.
- Hold for 20 seconds. Repeat 3 times

[Click here for video](#)



Assisted Cervical Spine Retraction

- Sitting straight-backed.
- Pull your chin in. At the end position take hold of your chin with your hands. Push your chin carefully further backwards. Hold for 20 secs and feel the stretch in your neck.

• Repeat 3 times
[Click here for video](#)



Assisted Neck Lateral Flexion

- Sitting.
- Tilt your head toward one shoulder until you feel the stretch on the opposite side. Using your hand gently pull your head further to the side. Hold 20 secs.

• Repeat to other side.
• Repeat 3 times
[Click here for video](#)



Active Posterior Scalene Stretch

- Sitting on a chair.
- While exhaling, push your upper ribs down with your hand and tilt your head away while at the same time rotating your head towards the muscle to be stretched. Hold 20 secs.

• Repeat 3 times
[Click here for video](#)

Save the Date

23 - 25th November 2022

Vascular Societies Annual Scientific Meeting 2022

Brighton Hilton Metropole, Brighton

**THE SOCIETY FOR
VASCULAR TECHNOLOGY OF
GREAT BRITAIN AND IRELAND**



Personal exercise program - Stretch

Denham Osteopathy, 7 St Francis Road, UB9 5JS, Denham Green, Bucks

All exercises should be approached with caution and not used for any undiagnosed pain.



Scapula Protraction with Dumbbell

- Scapula Protraction with Dumbbell/ baked bean can etc
- Lie on your back with your arm extended and holding a dumbbell in one hand.
- Raise your arm towards the ceiling bringing your shoulder blade away from the floor.
- Slowly repeat the movement.

• 3 sets 6 reps.

[Click here for video](#)

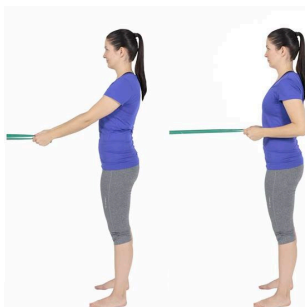


Resisted Shoulder Outward Rotation

- Stand tall. Bend your elbows to 90 degrees and hold an exercise band slightly narrower than shoulder width.
- Take the slack off at the starting position and rotate your arms outwards by squeezing your shoulder blades inwards and down. Return to the starting position in a controlled manner.

• 3 sets 8 reps.

[Click here for video](#)



Exercise Band Row

- Stand tall holding an exercise band with straight arms. The band is attached in front of you and the slack is taken off the band.
- Pull your elbows backwards and your shoulder blades in and down. In a controlled manner let your arms straighten back to the starting position.

• 3 sets 8 reps

[Click here for video](#)



Shoulder Ext with Exercise Band

- Stand up tall with your arms extended in front of you. Hold an exercise band that is safely secured high in front of you (palms facing upwards).
- Pull your arms down and squeeze your shoulder blades in. In a controlled manner, let the band slowly pull your arms back to the starting position.

• 3 sets 8 reps.

[Click here for video](#)



Cervical Spine Flexion

- Clasp your hands behind your neck keeping your little fingers one fingerwidth down from the back of the head.
- Pull your chin down (=nod) while holding your neck fixed with your hands.
- Hold 5 secs.

• Repeat 10 times

[Click here for video](#)