

An introduction to the
**Multidisciplinary
Haematology Team**



The British Society for Haematology (BSH) has been bringing haematology professionals together since 1960 to transform the care they provide to patients.

The Multidisciplinary Haematology Team provides a coordinated approach to the diagnosis, care and treatment of patients with blood disorders and disease. Read on to learn more about the wide variety of roles available to those considering a career in haematology.



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I would say haematology is the most wonderful, challenging, amazing, beguiling, fantastic specialty.

Graham Jackson

BSH President 2013 – 2014

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Haematology junior doctor

The system for junior doctors changed in August 2019. After completing their two-year Foundation training, junior doctors undertake Internal Medicine Training (IMT). For specialities that do not focus on supporting acute hospital care, such as haematology, junior doctors will do two years on Internal Medicine before specialising. The first year of specialty training is known as ST3, and the doctor will then be known as a specialty registrar.

During their Internal Medicine Training, junior doctors will become familiar with a range of conditions and presentations, including haematology conditions. They will complete six four-month rotations between specialisms in their Trust, which may offer the option of haematology. During this time, the junior doctors will be involved in the day-to-day management of acutely ill inpatients and attend outpatient clinics.

After completing their second year of Internal Medicine Training, junior doctors will need to decide whether to choose a specialty, such as haematology, or complete another year of IMT before specialising in an acute setting.

Qualifications

To enter Foundation training, you would need to have completed a (typically) five-year Medicine degree at university. Places for Medicine are very competitive and you would be expected to have good grades at A-level (or Advanced Highers in Scotland) in chemistry and biology, as well as relevant extra-curricular experience.

Haematology specialty registrar

A haematology specialty registrar will have completed five years for their Medicine degree, two years of Foundation training and two years of Internal Medicine Training (from August 2019).

Specialists in haematology are both clinicians involved in direct patient care and pathologists practising in the laboratory. The specialist training covers both aspects, and specialty registrars work towards a Fellowship of the Royal College of Pathologists (FRCPath) qualification to become consultants. Specialist training in haematology is five years, from ST3 to ST7.

Training in haematology

The training covers different areas and specialities in haematology, including oncology, paediatrics, haemostasis, stem cells transplantation and blood transfusion. This training gives the specialty registrar experience in working with a broad range of disease of the bone marrow and blood.

The training is carried out under the supervision of a consultant. The first year of training focuses on the presentation and management of haematological disorders as well as laboratory work. In later years, the training covers the more practical aspects of haematology.

Under the responsibility of a consultant, this would include managing chemotherapy delivery, managing stem cell transplants, sampling bone marrow, and performing lumbar punctures for diagnosis and chemotherapy.

Specialty registrars do regular ward rounds, both with a consultant and independently, where they will review each patient under the care of their consultant. As part of their training, specialty registrars spend at least six months in a District General Hospital to provide experience in a variety of settings. They may also get involved in research.

Over time, the registrar will develop the skills to work unsupervised. At that stage, the registrar takes the FRCPath exams, where Part 1 tests the knowledge gained by the registrar and Part 2 tests the practical skills and understanding.

To become a consultant haematologist, specialty registrars must hold a Certificate of Completion of Training (CCT). To receive this, registrars must gather evidence of their work and competencies, including appraisals, case reports and publications. This can be applied for once the FRCPath qualification has been completed and is typically after five years as a specialty registrar.



... I think haematology is a very dynamic specialty ...

Shivir Moosai
Haematology Registrar

Consultant haematologist

Consultant haematologists are responsible for the running of the haematology service in the hospital, being involved in the whole patient journey, from assessing a new patient, performing their diagnostic tests, interpreting the pathology (blood film and marrow aspirate), treating them and managing the complications. They participate in inpatient ward rounds, hold clinics and consults for patients and are responsible for teaching specialty registrars as part of their training.

Opportunity to specialise

Depending on the structure of the Trust, a consultant may specialise to varying degrees within haematology to complement the expertise of their colleagues. This specialisation could be a broad area such as malignant haematology, or a specific condition such as lymphoma or haemophilia.

Experience and responsibilities

Being a consultant is a senior role within a hospital and so recruiting hospitals may want to see evidence of experience of leadership, strong communication skills and desire to improve quality. Consultants manage the regulatory accreditations and improvement works within their department, which may involve introducing new technologies and services.

Depending on the set-up, there may be additional expectations and responsibilities for haematology consultants. A consultant will help with recruiting patients into regional and national clinical trials and may also be expected to initiate their own studies or get involved in research. A consultant may also act as the clinical lead for the laboratory services to support the lab director.



It is such an interesting and broad subject ...
I think we can find something for everyone.

Heidi Doughty

Consultant in Transfusion Medicine

Clinical research fellow/ Academic clinical fellow

If a specialty registrar is interested in doing research, then they may apply to become a Clinical Research Fellow. These positions typically last for a year or two to contribute to the development and running of a clinical trial for an aspect of haematology.

These fellowships offer training in all aspects of running haematology clinical trials including protocol development, regulatory procedures, associated translational research projects and presentation of research at meetings. They are considered to be out-of-programme research, meaning that they do not count towards the training required to become a consultant.

Depending on the size of the trial, it may offer the opportunity to collaborate with research institutions in the UK and abroad. The research work undertaken could lead to a higher degree (MD or PhD).

A similar alternative is an Academic Clinical Fellowship, which lasts for three years. Doctors spend a quarter of their time in research training and the remainder in specialist clinical training. It aims to provide doctors with Masters-level training to develop their academic research skills.

The Academic Clinical Fellowship gives junior doctors a chance to get formal training in research and gain experience if they are interested in applying to do a PhD research project.

Clinical academic/ Senior clinical lecturer

Haematology clinicians who have a particular interest in research can pursue training towards an academic career. Researchers help to discover and develop new tests and treatments for haematology patients, as well as improve current practices.

Senior clinical lecturers have honorary consultant status, so they can continue to practice as a doctor while also carrying out their research. Clinical academic positions are held at universities and so they are expected to teach and publish research findings. As a bridge between the two organisations, clinical academics are expected to build research links between the university and the NHS in haematology.

Qualifications and training

Clinical academic positions are highly competitive – they account for only five per cent of consultants. There are various levels of training available to get the research experience needed to become a clinical academic. At a minimum, applicants need to have completed a PhD (or equivalent).

Specialty registrars may choose to do a four-year academic clinical lectureship after their PhD. During this lectureship, the registrar spends half of their time on research and half in clinical training in their specialty.

Once they have completed their professional training and PhD, consultant doctors and nurses may be eligible to apply for a five-year clinician scientist fellowship. This funding allows them to focus on research for periods while being able to maintain their clinical skills regularly. This experience gives the clinician scientist the chance to develop their independence as a researcher and establish their own research group to make the transition to an independent academic clinician.

Biomedical support worker

Biomedical support workers are based in hospital pathology departments and may work in haematology labs. They receive and process patient samples for testing, for example, blood tests to help diagnose or monitor anaemia or leukaemia. The biomedical support worker will sort and prepare the samples before sending them to the lab for analysis.

They also support the running of the lab through ensuring health and safety standards are met, maintaining the stock of laboratory consumables and preparing reagents and equipment. Support workers carry out administrative tasks, such as checking requests coming to the department, recording the dispatch of blood products and entering patient data onto the system.

Under supervision, the support workers can also perform analysis of samples in some cases. They may also assist in point of care testing outside of the lab.

Training and qualifications

Applicants for biomedical support worker roles typically need GCSEs in English, Maths and Sciences. The role can be an excellent way to get initial laboratory experience for those who want to train to become a Biomedical Scientist. Biomedical support workers may be expected to complete the Certificate of Achievement Part I from the Institute of Biomedical Sciences to demonstrate the skills they have gained.



I think haematology is probably the most exciting discipline.

Daniel Catovsky
BSH President 1996–1997

Haematology biomedical scientist

Depending on the size of the haematology service there may be a couple of dozen biomedical scientists working in different areas, including coagulation, andrology and blood transfusion. The title biomedical scientist can cover a wide range of bands, and the level of responsibility will depend on seniority.

The type of day-to-day work will depend on the speciality. Within the transfusion service, this could include checking the batches of blood after transport, antibody identification for a patient ahead of a transfusion, analysing samples, checking a patient's blood type and screening for antibodies to ensure they receive the right blood for them.

In coagulation, a biomedical scientist might perform tests to monitor therapies, investigate unexplained test abnormalities and for diagnosing conditions such as haemophilia or thrombophilia. Alternatively, they might examine blood samples under a microscope to identify a change in white blood cells or the presence of malarial parasites.

They also carry out work to keep the lab running, such as monitoring stocks of reagents and calibrating equipment.

Training and qualifications

The typical route to become a biomedical scientist is through a degree in Biomedical Science, having completed three A-levels in biology and chemistry. This is then followed by a training position in a lab. With enough evidence to demonstrate the experience gained across different aspects of haematology, registration with the Health and Care Professional Council (HCPC) will allow the use of the protected title biomedical scientist.



Consultant clinical scientist

Clinical scientists work on highly specialised laboratory techniques to support the haematology team. These techniques could include providing molecular diagnostics for haematological malignancies or analysing genetics data related to inherited red blood cells disorders. They provide evaluation, interpretation and reporting of results to the clinic.

Clinical scientists are expected to contribute to quality management activities, including compliance with laboratory accreditation standards, teaching and training.

Training and registration

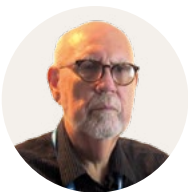
A clinical scientist is a protected title and requires registration with the Health and Care Professional Council (HCPC). The criteria for registration can be met by either completing the NHS Scientist Training Programme (STP), completing an accredited BSc degree in healthcare science for the NHS Practitioner Training Programme, or by training as a Biomedical Scientist and building sufficient experience to gain a certificate of attainment from the Institute of Biomedical Science.

The STP is a three-year programme of work-based learning, underpinned by a University-accredited master's degree. Trainees are employed by an NHS Trust for the duration of the programme and will be required to spend time in core haematology, transfusion and haemostasis laboratories, as well as undertaking an election block and developing leadership skills. Applicants for this programme are expected to have a degree in a relevant science.

There are alternative routes to HCPC Clinical Scientist registration - these will be applicable to Biomedical Scientists who wish to enter Higher Specialist Scientific Training (HSST) and ultimately progress to consultant clinical scientist level.

The HSST in haematology is a five-year programme which provides the skills to manage pathology laboratories and services and become a consultant clinical scientist.

Consultant clinical scientists have the same level of training as medically qualified pathologists. Their scientific expertise is combined with training in patient care, allowing them to manage the diagnosis of disease, lead services and guide a team of healthcare staff.



... my advice to any budding young scientists in haematology is don't hesitate, go for it.

Keith Hyde

Consultant Clinical Scientist (Retired)

Haematology pharmacist

Pharmacists can specialise within haematology, although many hospitals combine this with oncology as there is a lot of crossover with managing chemotherapy. Specialist pharmacists support haematology consultants, including advising on appropriate treatments/ regimes, formulary compliance and funding approval, proper therapeutic monitoring, admission/discharge support and advice on all aspects of the medicines used in haematology patients.

Before developing a specialty in a hospital setting, pharmacists need to complete a clinical diploma. This diploma takes about two years alongside the job and provides theoretical and practical learning about a wide range of areas.

With further qualifications, the pharmacist can become an independent prescriber to maximise the impact the haematology pharmacist can have within the clinical team. A prescribing pharmacist will have consultations with patients to assess side effects, quality of life, compliance issues, any new symptoms, blood results and scan reports, before deciding whether the patient should proceed with the next course of medication or if any adjustments are needed.

Haematology ward nurse / staff nurse

Like most nurses working on a ward, the daily duties include overseeing the day-to-day running of the unit, supporting the running of any outpatient clinics, and meeting the needs of patients. Nurses will also coordinate with several other specialist healthcare professionals and perform observation checks.

At least two A-levels are usually required to enrol in a nursing degree, which is the typical route into nursing. Some places offer a four-year nursing degree apprenticeship, which includes part-time study.

Haematology nursing specifically can involve administering chemotherapy, preparing IVs and sampling bone marrow. Nurses also provide supportive care for blood transfusions and bone marrow transplants.

Haematology nurses will develop specialist knowledge, from information about related conditions to recognising and managing haematology emergencies.

Haematology clinical nurse specialist

Clinical nurse specialists are often expected to have Masters-level education and an advanced level of knowledge about the care of haematology patients. Because of this more experienced background, these nurses can practice autonomously. They run nurse-led clinics and provide ward-based education.

Clinical nurse specialists work with doctors, nurses and other healthcare professionals to support the patient as much as possible. Their technical knowledge may help to tailor the pathway for individuals.

A clinical nurse specialist may be named as a patient's key point of contact during their treatment. They can offer support and advice to patients and their families about their illness, medications and side effects.



You'll never look back once you get hooked on haematology.

Jackie Green

Nurse Consultant, Haematology

Haematology research nurse

Research nurses experience a mix of direct patient care and research involvement.

They coordinate and monitor the care of patients on several studies, from small early-stage safety trials to major clinical trials with a national profile. Depending on the specialty of the unit, this could include testing new forms of chemotherapy for haematology malignancies or drugs for haemophilia.

Research nurses work within a team of data managers and consultants. They work closely with the inpatient and outpatient support services and actively contribute to multidisciplinary team meetings. They assist with reviewing the trial protocols, identifying resource implications and setting up the trial on site.

As part of their duties, research nurses help to educate patients and colleagues, coordinate care of patients on trials, collect and prepare biological samples, collect trial data and monitor the side effects of treatments. They also provide support to haematology patients and their families during their treatment.

Specialised skills and knowledge

Becoming a research nurse means developing specialised skills and knowledge about the conduct of clinical trials, the therapies and the relevant disease sites. Research nurses will help to identify new trial volunteers by attending clinics and multidisciplinary team meetings. They discuss trials with patients and enable them to make informed choices concerning their involvement in clinical trials by providing advice and information and acting as the patient's advocate.

Research nurses are responsible for ensuring the regulatory aspects of clinical trials meet Good Clinical Practice standards, so they need a good understanding of the research process. Being a research nurse often includes opportunities to attend research conferences and seminars relevant to clinical trials.



Haematology physician associate

Physician associates (PA) are dependent practitioners, which means they must work in collaboration with a named consultant or general practitioner (GP). However, PAs work independently in assessing, investigating and diagnosing patients with appropriate consultant/ GP oversight and support.

Physician associates complete a two-year, intensive masters-level postgraduate degree (minimum 3,150 hours) leading to the award of PGDip or MSc in Physician Associate studies. Prior to this, PAs need to have completed an undergraduate degree in a life science or healthcare for entry to a PA course.

Physician associates are primarily trained in adult general medicine, with speciality rotations during their training in general surgery, obstetrics and gynaecology, paediatrics, psychiatry, community medicine and emergency medicine. They must complete a minimum of 1,400 hours in clinical practice during the two-year training programme, such as on wards, in clinics or general practice settings. They must also complete a further 200 hours of designated clinical learning in addition to the above, which can be in simulation.

Upon graduation, PAs are then expected to sit the independent PA National Certification Examination at the Faculty of Physician Associates, Royal College of Physicians, to be deemed safe to practice.

Physician associates are predominantly medical generalists, working within the speciality team. They graduate being able to assess, investigate, diagnose and manage a vast array of general medical conditions, for example asthma, COPD, diabetes and thyroid dysfunction as well as assessing, investigating and then referring on more complex medical diagnoses.

In clinical practice

With time spent in clinical practice, the individual PA will gain speciality knowledge from within the area they work. This is through both clinical exposure as well as dedicated consultant/GP mentorship and teaching. With appropriate oversight and time, the individual PA will begin to take on a greater level of autonomy for patient care within their speciality, all the time maintaining their generalist knowledge and skill set. This generalist approach and knowledge is useful within the specialist haematology team, as many patients with haematological issues will also have other medical conditions that need managing. To ensure that this generalist medical knowledge is retained, PAs are assessed every 6 years through the mandatory PA National Recertification Examination.

Haematology physician associate continued

Physician associates are employed directly by an NHS organisation and usually by a specific department. As such, they predominantly remain within the same department and do not rotate like doctors in training (e.g. FY, IMT doctors). This enables PAs to offer long-term medical continuity for patients at the non-consultant level, becoming the institutional memory for many departments. This can benefit doctors in training who rotate through the speciality, with the PA offering speciality and local knowledge as well as being able to teach and supervise speciality-related procedures.

In haematology

Physician associates who choose to work within haematology will gain exposure to a wide array of general medical and speciality related diagnoses. As medical generalists, PAs are able to assess and routinely manage medical co-morbidities, perform chronic disease assessment and reviews (e.g. asthma, COPD, diabetes), as well as manage acute medical emergencies that arise on the haematology wards and in outpatient settings.



It's actually a very enlightening speciality ... you will really, really enjoy the speciality once you're immersed in it.

Jamie Saunders

Physician Associate in Haematology

Haematology physician associate continued

Upon initial graduation, PAs would be expected to be able to recognise and investigate patients presenting for the first time with more common haematological diagnoses, such as immune thrombocytopenic purpura or genetic haemochromatosis. With time spent in practice alongside their supervising consultant, the PA in haematology will then start to take on a greater level of autonomy in managing these conditions, as well as start to gain exposure to more complex patients such as acute leukaemia or high-grade lymphomas. Again, with time in the speciality, the PA in haematology will then start to take on more individual autonomy in assessing and managing these complex diagnoses. This is all within defined levels of supervision from their named supervising consultant haematologist.

Physician associates practising within haematology are able to be trained in speciality-related additional skills, for example PAs can be taught to perform bone marrow aspirate and trephines, lumbar punctures, PICC line insertion, femoral line insertion and venesection.

They are able to conduct inpatient ward round reviews independently, with remote consultant supervision, conduct outpatient consultations independently within consultant led clinics, as well as alleviate some of the administrative burdens such as discharge summaries and referrals to other specialities.

PAs can also become involved in audits and quality improvement projects, helping to drive standards and ensure compliance with both national and local policies. PAs are also starting to become involved in departmental and speciality related research and clinical trials, as well as leading on PA-related practice and education focused research.



Health care assistant

Health care assistants are also known as nursing assistants and work under the supervision of registered nurses.

Most of their time will typically be spent on patient monitoring and recording changes in their health. This work involves checking their vitals, ensuring that lab tests are processed and reporting any changes.

However, the role also covers patient support and assisting with preparation for procedures. The health care assistant helps patients who are not able to carry out personal tasks themselves, such as moving, washing and feeding. They might also take blood samples and sterilise equipment to support the nurses.

Qualifications

As health care assistants do not specialise in an area of medicine, they may move between departments. There are no set entry requirements to become a health care assistant, but GCSEs in English and maths may be expected to demonstrate literacy and numeracy.

Health care assistants are expected to complete the National Care Certificate, typically within the first three months. This qualification provides a set of standards for health and social care workers in different areas of care, such as nutrition, safeguarding and infection control.

Health care assistants may be able to study for a level 2 CACHE Diploma in Clinical Healthcare Support, and then potentially a level 3 diploma. This qualification would allow them to train to become assistant practitioners, who have more experience and can work more autonomously.



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There's no other specialty that really crosses all of the fields and is as interesting, with a whole community of people who are absolutely fascinated in their different areas.

Finbarr Cotter

BSH President 2010–2011



Haematology dietitian

Dietitians are qualified and regulated health professionals that assess, diagnose and treat dietary and nutritional problems at an individual and wider public-health level.

Dietetic training involves either a three- or four-year undergraduate degree or a two-year postgraduate diploma, some will go on to do Masters or PhD level training in their relevant fields. They are registered with the Health and Care Professions Council (HCPC).

The dietitian works alongside the MDT to support patients manage complex nutritional issues relating to their haematological condition and associated treatments. Nutritional interventions can support improvements in functional status and wellbeing, reduce admissions, lead to fewer treatment interruptions and improve treatment tolerance.

This may include nutritional complications such as:

- Malnutrition or cachexia,
- Over-nutrition
- Reduced intake or malabsorption secondary to treatment/disease related complications i.e. Mucositis, GvHD, GI malabsorption, pancreatic insufficiency, bile acid malabsorption (BAM), lactose insufficiency
- AKI and CKD – hyperkalaemia/ protein or fluid restriction
- Steroid induced diabetes
- Malignant bowel obstructions i.e. gastric lymphoma

Working with the MDT

They work with the broader MDT to optimise nutritional impact symptoms i.e. taste changes, mucositis, dry mouth, anorexia, diarrhoea, renal insufficiency, pain, which impact on the intake or utilisation of nutrition. They also work closely with psychologists (where available) or specialist nurses to optimise psychological distress around food i.e. food aversions that have developed during cancer treatment.

Treatment plans are holistically developed with the patient, their family or carers and MDT utilising information from dietary assessments, biochemistry, medical history, treatment, psychosocial status and medications (including drug nutrient interactions).

Treatment plans vary and will include food fortification advice, oral supplement prescribing, enteral feeding or parenteral nutrition. Special diet advice may also be given i.e. food hygiene during neutropenic episodes, food allergy/ intolerance advice, probiotics or prebiotic diets, drug nutrient interactions with food supplements/ diet, renal diets for AKI or CKD, modified diets for outlet obstructions. It may also include recommendations to MDT around medication adjustment i.e. pancreatic enzyme replacement, antiemetics, anti-diarrhoeals to support dietary intake.

In haematology

Dietetic services to haematology patients vary nationally. All inpatients should have access to a dietitian by a referral-based system i.e. post nutritional screening. This will be delivered either by a generalist dietitian at the hospital or a specialist haematology dietetic service.

Some hospitals will have access to an outpatient haematology dietetic service who will attend clinics or do telephone/ video consultations. Some services will be funded for cancer pathways only i.e. haematopoietic stem cell transplantation (HSCT) under JACIE accreditation whereas others will see non-malignant disease as well. Where there are no outpatient dietetic services patients can be referred to community dietetic services or GPs for nutritional supplementation advice and support.

Further information

Read about the pathways our members have followed into haematology at
<https://www.b-s-h.org.uk/membership/meet-our-members>

Further information about working in haematology can be found at:

NHS health careers

<https://www.healthcareers.nhs.uk/explore-roles>

Nursing and Midwifery Council

<https://www.nmc.org.uk/education/becoming-a-nurse-midwife-nursing-associate/becoming-a-nurse>

Royal College of Nursing

<https://www.rcn.org.uk/professional-development/become-a-nurse>

Joint Royal Colleges of Physicians Training Board

<https://www.jrcptb.org.uk/specialties>

Royal College of Pathologists

<https://www.rcpath.org>

Join the British Society for Haematology

If you are training or practising in the field of haematology, we invite you to join the UK's largest professional network for the specialty. We are a multidisciplinary society, and we welcome membership applications from students, nurses, biomedical and clinical scientists, pharmacists and allied health professionals as well as medics.

Free Associate membership is available for those at the start of their careers as well as most nursing and allied health professional roles.

Visit the website for further information and to apply for membership:

<https://b-s-h.org.uk/membership>

Volunteering

Volunteers play a crucial role in helping to deliver the Society's charitable objectives and supporting the haematology community. BSH is very grateful to all the volunteers that have helped with this and other projects. If you would like to help BSH we have a wide range of opportunities for those who wish to get involved in BSH's activities.

<https://b-s-h.org.uk/about-us/get-involved>

BSH Guidelines

The BSH Guidelines provide up-to-date evidence-based guidance on the diagnosis and treatment of haematological diseases.

The Guidelines team welcomes new members from a variety of roles to join writing groups and task forces. You can register your interest in participating by sending details of your specialty to Rita Gupta, Guidelines Programme Manager, (rita@b-s-h.org.uk) or Summer Zebian, Guidelines Officer, (summer@b-s-h.org.uk) and the team will contact you when a relevant group is recruiting.

Please note applicants will need to be working in a UK hospital.



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I think we work in a very multidisciplinary team and I think that's a huge advantage.

Brenda Gibson

BSH President 2007–2009

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