

Clinical perfusion science

Perfusion is the term used to describe the passage of fluid through tissue.

Clinical perfusion scientists are members of the open-heart surgery team.



You'll work primarily in cardiac operating theatres, as a part of the open-heart surgery team

Working life

As a clinical perfusion scientist, you'll work primarily in cardiac operating theatres, as a part of the open-heart surgery team.

As a clinical perfusion scientist, you'll:

- use a number of highly technical, mechanical and electronic devices to ensure that oxygen reaches a patient's body through the blood, when the patient's lungs and heart are temporarily not functioning
- control the equipment (heart-lung machine) which temporarily takes over a patient's respiration (breathing) or circulation of blood (or both) during open-heart surgery.

Who will I work with?

As part of the open-heart surgery team, you'll work with staff including [cardio-thoracic surgeons](#) ^[1], [anaesthetists](#) ^[2], [cardiologists](#) ^[3], ^[3] [healthcare scientists working in cardiac sciences](#) ^[4], [theatre nurses](#) ^[5] and [operating department practitioners](#) ^[6].

Want to learn more?

- [Find out more about the entry requirements, skills and interests required to enter a career in clinical perfusion science](#) ^[7]
- [Find out more about the training you'll receive for a career in clinical perfusion science](#) ^[8]

- **Pay and conditions**

Most jobs in the NHS are covered by the Agenda for Change (AfC) ^[9] pay scales. This pay system covers all staff except doctors, dentists and the most senior managers. As a clinical perfusion scientist, your salary would typically be start on AfC ^[10] band 7. There are opportunities to progress to much more senior pay bands.

Staff will usually work a standard 37.5 hours per week. They may work a shift pattern.

Terms and conditions of service can vary for employers outside the NHS.

- **Where the role can lead**

With further training and/or experience, you may be able to develop your career further and apply for vacancies in areas such as further specialisation, management, research, or teaching.

Healthcare science staff often work at the forefront of research and innovation, so that patients are continually receiving the very best healthcare. For example, in clinical perfusion sciences, staff could be investigating how less invasive surgical procedures of the heart impact on their work, or analysing how their practices should differ when open heart surgery is performed on children rather than adult patients.

- **Job market and vacancies**

Job market

The number of clinical perfusion scientists is small in comparison with many other healthcare scientists. There are around 400 clinical perfusion scientists working in the UK.

Finding and applying for jobs

Check vacancies carefully to be sure you can meet the requirements of the person specification before applying and to find out what the application process is. You may need to apply online or send a CV for example.

Vacancies for trainee and qualified clinical perfusion scientists appear on the NHS Jobs website ^[11] and the website of the Society of Clinical Perfusion Scientists of Great Britain and Ireland ^[12].

As well as these sources, you may find suitable vacancies in the health sector by contacting local employers directly and searching in local newspapers.

Find out more about applications and interviews [13].

If you think you might be interested in clinical perfusion science, it may be possible to arrange an informal visit, through the Chief Clinical Perfusion Scientist, of the nearest perfusion unit to your home. There are a number of these within the NHS and in the private sector in Great Britain and there are six centres in the Republic of Ireland. You can obtain a list of these hospitals from the Administrator of the Society of Clinical Perfusion Scientists of Great Britain and Ireland [14].

Volunteering is an excellent way of gaining experience (especially if you don't have enough for a specific paid job you're interested in) and also seeing whether you're suited to a particular type of work. It's also a great way to boost your confidence and you can give something back to the community!

Find out more about volunteering and gaining experience [15].

• Further information

For further information about a career in clinical perfusion science, please contact:

- Academy for Healthcare Science [16]
- Health and Care Professions Council [17]
- National School for Healthcare Science [18]
- The Society of Clinical Perfusion Scientists of Great Britain and Ireland [19]

Other roles that may interest you

- Cardiac sciences [20]
- Operating department practitioner [21]
- Vascular science [22]
- Vascular surgery [23]

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