

Medical Pathologist

Medical pathologists, or clinical pathologists, are doctors who specialise in investigating the nature, causes and processes of disease. Using the tools of laboratory science they analyse samples of human tissue, blood and other fluids. They use their findings to help diagnose and treat illness in patients.

The Work

There are four most common specialities within pathology.

- **Histopathology** - study of tissues and cells playing a key role in diagnosing cancer and other diseases. They are the only pathologists to carry out post mortems.
- **Haematology** - study of the blood, diagnosing and treating people with blood disorders
- **Chemical Pathology** - studying the chemistry of the body, helping diagnose and plan the treatment of diseases such as diabetes
- **Medical Microbiology and Virology** - they work together to diagnose and manage infections in patients and communities.

There are other fields of pathology that are smaller, but still important such as, immunity, genetics and reproduction, toxins and animal disease. There are actually 17 pathology specialties in total, offering a diverse range of career options.

Only a very small number of pathologists specialise in forensic pathology, despite its high profile on TV. Usually, the specimens pathologists examine come from patients who are very much alive.

You could be:

- analysing, or supervising, detailed and complex analysis of specimens of blood or other body fluids and tissues
- attending operations and providing rapid diagnoses from samples taken during surgery
- dealing with patients in hospital wards and out-patient clinics, providing diagnoses from tissue samples
- giving early warning of possible disease, monitoring its progress and measuring the patient's response to treatment
- researching and developing new diagnostic tests and treatments
- organising work in laboratories and supervising other laboratory staff
- explaining test results to other health professionals and giving advice on further tests and medical assessments
- attending regular meetings with other medical specialists to discuss the treatment of specific cases
- if a forensic pathologist, carrying out post-mortem examinations and attending court to give evidence in criminal cases.

Pay

As of April 2019, in most junior posts (Foundation Year 1) you would earn a basic £28,111 a year, increasing to a basic of £35,052 a year in Foundation Year 2. In specialist training this can rise to £43,607 a year (depending on

the length of training).

Training salaries increase between 20% and 50% with supplements, depending on the number of extra hours and intensity of work involved. A doctor in the new specialty doctor grade earns between £40,842 and £76,161 a year. A consultant's salary ranges from £82,669 to £109,849 a year or more.

Conditions

- You would spend a good deal of your time in laboratories.
- You would probably also spend time directly involved in patient care.
- You usually work regular hours.
- You may have to travel to conferences.
- If you work in a laboratory, you would usually have to wear a white lab coat or protective gear such as goggles, face mask or rubber boots.
- Most pathologists work in hospitals, laboratories and clinics.
- Some work in university medical faculties, professional societies, research organisations or government agencies.

Getting In

To qualify as a pathologist you need a degree in medicine and surgery which is recognised by the General Medical Council (GMC).

- You can study the 5-year MB ChB course at the universities of Aberdeen, Dundee, Edinburgh (6 years) and Glasgow. Entry requirements are 5 good Highers, usually at one sitting, including Chemistry and (depending on the university) 1 or 2 from Maths, Biology and Physics, with English and science subjects at National 5. Although most institutions set the minimum entry of 5 Highers at AAAAB, the majority of applicants have AAAAA.
- If you have 5 good Highers but not more than one science subject, the University of Dundee runs a 6-year course which includes a pre-medical year.
- The 3-year BSc Hons Medicine at the University of St Andrews guarantees its graduates the chance to finish their training at one of the four Scottish medical schools or in Manchester.
- A course is available at the universities of Dundee and St Andrews for those with an arts or science degree (at least 2:1). The Scottish Graduate Entry Medicine Programme (ScotGEM) is 4 years and leads to the MB ChB. There is a focus on rural health and it offers opportunities to train in remote and rural areas.
- For all courses except ScotGEM, before applying to medical school you must sit the University Clinical Aptitude Test (UCAT). For entry in 2020 you must register and book a test before 18 September 2019 and sit the test by 2 October 2019. If you get an Educational Maintenance Allowance (EMA) you can apply for a bursary to cover the cost of the test. Check the [UCAT website](#) for further details.
- For the ScotGEM course you are required to sit both the UCAT Situational Judgement Test for Admission to Clinical Education (SJTace) and the Graduate Medical School Admissions Test (GAMSAT). Dates for the SJTace are as above and the sittings for the GAMSAT are held in March and September.
- For all courses, including ScotGEM, you must apply to UCAS by 15 October 2019 for entry in 2020.

Other requirements:

- You will require a satisfactory criminal record check from Disclosure Scotland to show that you are suitable for this type of work. Contact Disclosure Scotland for details on the type you would need.
- You must undergo screening for blood borne diseases such as Hepatitis B and C or HIV. Infection does not prevent you from qualifying or practising as a doctor, but there is a restriction on carrying out exposure-prone procedures.
- It is helpful to have a driving licence.

After your degree you do a 2-year foundation training programme, which gives you registration with the GMC, which you need to work as a doctor (see 'Training' below). Most pathologists work for the National Health Service (NHS), but some forensic pathologists, particularly in England, work in independent practices.

What Does It Take

You should be:

- practical, logical and methodical
- able to solve problems and work under pressure
- able to use your initiative to explore routes of enquiry
- patient and willing to persevere
- accurate and careful in doing the work and recording results.

You should have:

- an enquiring mind
- good judgement and the ability to make critical decisions
- a good eye for detail
- a strong stomach
- excellent communication skills.

Training

- After completing your degree, you must complete 2 years of core training followed by specialty training in pathology. Each pathology specialty has a separate training programme. You can get details from the [Speciality Medical Training](#) website.
- Entry to the Specialty Training Programme is very competitive so it is important that you try to gain as much insight into pathology as possible.
- You would also need to take the examinations of the Royal College of Pathologists (RCPATH), which consists of 2 parts.
- The FRCPath training programme lasts a minimum of five years.
- You should try to get a short taster with the pathology department in your hospital to make sure that pathology is the route you want to take.
- You will be assessed throughout your training, and if the correct standards are met, you will be awarded a Certificate of Completion of Training (CCT). This will allow you to join the GMC Specialist Register.
- Forensic pathology is a specialised branch of histopathology. You can only start this training after you have graduated from medical school and have completed your core training. Training in forensic pathology starts after two to three years training in histopathology and after you have achieved Part 1 exams of the

Royal College of Pathologists.

Getting On

- You may specialise further and become an expert in a very specific area.
- As a medically qualified pathologist you could progress to become a consultant, responsible for your specialism in a large hospital.

More Information

The job prospects for medical pathologists are very good. Not all pathologists need to be doctors. You can have a career in the field of pathology as a clinical or biomedical scientist. It is also possible to become a veterinary pathologist or oral pathologist. As with medical pathology you must first get your vet medicine or dentistry degree and then specialise in pathology.

If you want a taste of what it is like to be a doctor have a look at the Medic Insight programme. This is a week long programme aimed at fourth and fifth year pupils in Scotland who are interested in becoming doctors. It is run by Glasgow, Edinburgh and Dundee universities. See the university website for details.

Contacts

Chartered Society of Forensic Sciences

Tel: 01423 534646

Email: info@csofs.org

Website: www.csofs.org

Twitter: @CharterForSci

Facebook: www.facebook.com/TheForensicScienceSociety

General Medical Council (GMC)

Email: gmc@gmc-uk.org

Website: www.gmc-uk.org

Twitter: @gmcuk

Facebook: www.facebook.com/GMCUK

Graduate Medical School Admissions Test (GAMSAT)

Email: gamsat@acer.org

Website: gamsat.acer.org

Twitter: @GAMSAT_ACER

Facebook: www.facebook.com/Gamsat-ACER-Graduate-Medical-School-Admissions-Test-252785548206744

NHS Scotland Careers

Website: www.careers.nhs.scot

Website (2): jobs.scot.nhs.uk

Twitter: @NHSScotCareers

Facebook: www.facebook.com/NHSScotlandCareers

Royal College of Pathologists

Tel: 020 7451 6700

Email: info@rcpath.org

Website: www.rcpath.org

Twitter: @RCPath

University Clinical Aptitude Test (UCAT)

Tel: 0161 855 7409

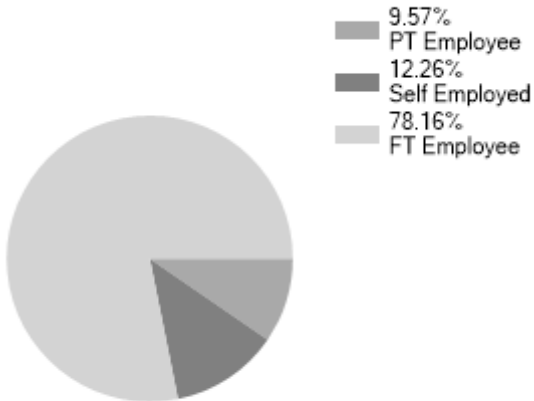
Website: www.ucat.ac.uk

Twitter: @UCATofficial

Facebook: www.facebook.com/UCATofficial

Statistics

Employment Status UK %



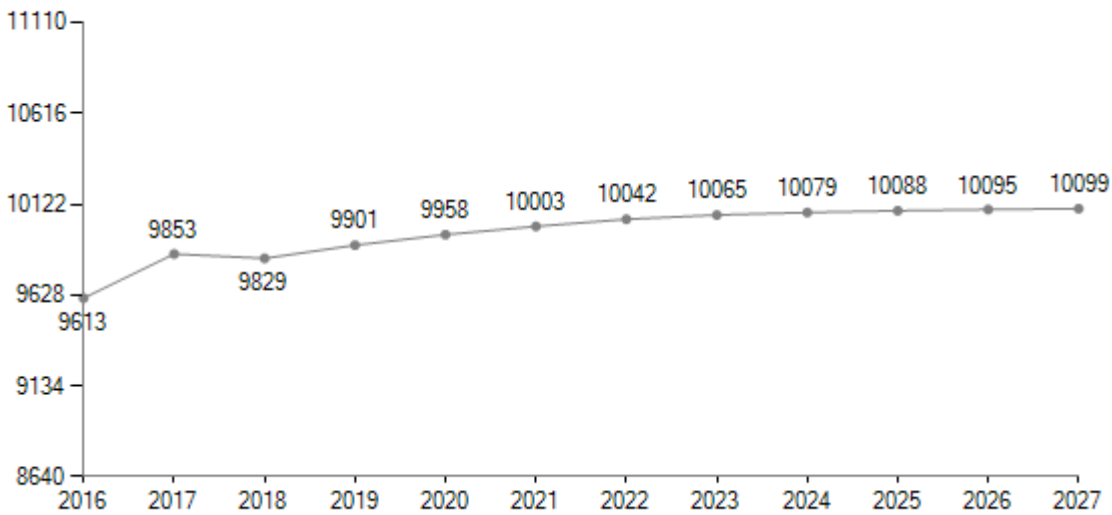
Past Unemployment - Scotland

Date	Unemployed
Dec 2016	0.05%
Dec 2018	0.04%

LMI data powered by [EMSI UK](#)

LMI data powered by [LMI for All](#)

Predicted Employment in Scotland



LMI data powered by [EMSI UK](#)