

# "What I really love about chemical pathology is that the job involves an understanding of the patient's metabolism which is then applied to the clinical biochemistry findings."

Dr Andrew Day is a consultant chemical pathologist at Bristol Royal Infirmary. He is also director of examinations at the Royal College of Pathologists.

## Dr Andrew Day

### Consultant

#### Employer or university

University Hospitals Bristol NHS Foundation Trust

#### Salary range

Over £65K

Dr Andrew Day portrait

### How I got into the role

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I got into medicine through my love of science, especially chemistry. I thought about studying biochemistry or pharmacology, but was encouraged to apply for medicine, and studied this at the University of Cambridge and the University of London (UCL).

I knew early on in my training that I didn't want to work in acute medicine or as a GP. At this stage I became interested in chemical pathology, as I really enjoy applying an

understanding of human physiology <sup>[1]</sup> and biochemistry to patient care. I talked to a couple of clinical biochemists and chemical pathologists in the hospital where I worked as a house officer (equivalent to a specialty post these days) to find out more about the role. The Royal College of Pathologists also provided me with careers advice, which was incredibly helpful .

After a period of working in general medicine, which was really useful for the role, I settled into a chemical pathology training programme.

## What I do

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The role is very varied and there are several distinct aspects to it. One aspect is direct patient care in outpatient clinics. I run a lipid disorders <sup>[2]</sup> clinic and a diabetes clinic, as these are my main long-standing clinical interests. Patients I manage are from a wide age range from age 16 to the elderly. Much of this work is about reducing patients' risk of future cardiovascular <sup>[3]</sup> disease, including recommending appropriate drug treatment based on a good understanding of metabolism.

I am also part of a multidisciplinary (MDT) nutrition team, consisting of a gastroenterologist, two specialist nurses, pharmacists, and a dietician. We manage patients who are receiving parenteral nutrition <sup>[4]</sup> (where patients are fed intravenously). My role as a consultant in this team is to advise when patients experience issues with their biochemistry or metabolism such as problems with blood glucose levels.

I spend one day per week in a district general hospital, where I do a ward round, visiting patients on parenteral nutrition <sup>[4]</sup>. Both there and in my own hospital I also visit patients on the wards on an ad hoc basis when specific biochemical or metabolic <sup>[5]</sup> issues arise. I particularly enjoy applying clinical biochemistry directly to patient care and so find this activity very satisfying. I enjoy discussing cases with junior doctors, who value the support and advice we are able to provide, and we often work in alongside doctors in specialties such as diabetes and endocrinology <sup>[6]</sup>.

Like most departments, we operate a duty biochemist rota and this means that, about one day a fortnight, I am based in the laboratory looking at abnormal blood results that need interpretation, and answering queries from hospital doctors and GPs. Around 50% of our work comes directly from GPs. We also visit GPs and practice nurses to discuss our services and to provide training and education.

Within the laboratory, I work closely with consultant clinical scientists. Clinical scientists are expert in scientific aspects of the specialty, or highly specialised areas such as paediatric clinical biochemistry who are not medically-qualified and don't have responsibility for direct patient-care.

The day-to-day laboratory work is performed by biomedical scientists, and I work closely with these colleagues over a whole range of issues. This could be to do with the efficient running of the lab or with the development and oversight of laboratory tests. Chemical pathologists need to have a good understanding of all biochemistry tests. One of the great things about being a chemical pathologist is that we work closely with such a wide range of scientists as well as with medical colleagues and directly with patients.

In my previous consultant post, as a single-handed chemical pathologist in a district general hospital, I had management responsibilities as head of department. I am due to take up similar responsibilities in Bristol shortly. Management is an important aspect of the role of a chemical pathologist, as it is in any consultant role.

Over the course of my career, I've developed a particular interest in education and have had several senior roles in this area. I have been chief examiner in chemical pathology at the Royal College of Pathologists and for the last eighteen months I have been director of examinations there. I spend approximately one day per week on this work. Previously I was head of the Postgraduate School of Pathology at Severn Deanery (part of HEE South West), with responsibility for trainees from all pathology specialties in our region, and for a period of time I was also director of medical education in my trust. Finally, I also have had time to write textbooks in chemical pathology, though I have never taken on an academic role in a university setting.

## **The best bits and challenges**

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What I really love about chemical pathology is that the job involves an understanding of the patient's metabolism which is then applied to the clinical biochemistry findings. This makes a difference to their care, which includes advice about achieving a diagnosis, interpretation of test results, and recommending further investigations. I also love being involved in teaching and training of future pathologists, other trainees and students.

The challenges include the ever-present need to justify the financial resources required for essential high quality pathology services (this is understandable with limited finances in the NHS). However, around 70% of all episodes of clinical care involve pathology tests, and effective use of pathology often saves money elsewhere.

## **Life outside work**

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The role doesn't have an onerous on-call commitment, permitting a good work-life balance. My passion is music - I enjoy singing and working as an organist and choir trainer. Although working hours are sometimes long, the work pattern is largely predictable and fits in well with a normal family life.

## Career plans and top tips for others

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I don't anticipate any major changes as I'm in the later stage of my career. I am looking forward to continuing to be involved in training, education and assessment.

#### Top tips:

- come and spend time with us to find out what chemical pathologists really do
- this career welcomes doctors with prior experience in other specialties, either core medical training [7] or other specialties
- there are lots of possibilities to pursue individual interests within chemical pathology eg outpatient care, more laboratory-based practice, teaching and training

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**Source URL:**<https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/pathology/chemical-pathology/real-life-story-andrew-day>

#### Links

[1] <https://www.healthcareers.nhs.uk/glossary#Physiology> [2]  
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