

A day in the life of a Clinical Scientist



Allan Dunlop graduated with a BSc in Medical Biochemistry from the University of Glasgow, where he subsequently completed his PhD. He then worked as a postdoctoral researcher in the area of cAMP phosphodiesterases and cellular signalling and undertook training as a Clinical Scientist in the department of Biochemistry at Aberdeen Royal Infirmary. Allan is currently employed as a Principal Clinical Scientist in the department of Clinical Biochemistry at the Queen Elizabeth University Hospital in Glasgow. Lorenza Giannella (Training Manager, Biochemical Society) spoke to him about his work.

How did you get into science?

I really enjoyed science at school and applied to study biochemistry as an undergraduate. Following this, I was keen to further develop my research skills and experience by undertaking a PhD in biochemistry and molecular biology. I then worked as a postdoctoral research assistant for a few years before training as a Clinical Scientist in biochemistry, within the NHS.

Can you describe a typical day?

From the collection of a patient sample through its arrival and analysis in the laboratory to the reporting of a result, there are a number of steps in which Clinical Scientists are involved.

A major part of our job is to provide a clinical advisory service to medical and nursing staff on the selection, performance and interpretation of adult and paediatric biochemistry tests. A typical day as the Duty Biochemist would involve acting as the point of contact for phone queries from clinicians wishing to discuss results. In addition, we take responsibility for authorising and providing

interpretative comments on lab reports covering a wide repertoire of biochemistry tests and for communicating urgent results.

As I work in a large teaching hospital, our laboratory also provides expertise in several subspecialties such as: Toxicology, Inherited Metabolic Disease, Endocrinology and Therapeutic Drug Monitoring. Clinical Scientists typically specialize in one of these areas as they progress and taking responsibility for leading one of these sections might also fall under your daily remit.

Attending meetings happens regularly and these can range from departmental, multi-disciplinary, regional or national. We are also actively involved in the development, evaluation and implementation of new assays, something which allows us to apply our analytical expertise.

Consequently, every day can be different as Clinical Scientists undertake a variety of roles including: clinical liaison, research and development, clinical audit, service development, teaching, management and quality assurance.

CAREERS IN MOLECULAR BIOSCIENCE



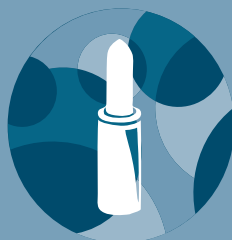
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What is your advice for someone who would like to pursue a career as Clinical Scientist?

As with any prospective job, do your research. There is a wealth of information online about careers in healthcare science and the various disciplines available. In addition, contact your local NHS laboratory and ask if you can visit and speak to clinical scientists and recent trainees.

A career as a Clinical Scientist is varied and rewarding but not to be undertaken lightly. In my own discipline (clinical biochemistry) there is a lot to learn. The initial 3-year training scheme includes an MSc and there are professional exams to take beyond this period, with a strong emphasis on continuous professional development. There is also a clear and structured career pathway with many people working toward the aim of becoming a Consultant Clinical Scientist.

What inspires you about your job?

My job allows me to combine my skills as a scientist with a keen interest in the human body in health and disease. Importantly, the work we do has a direct and immediate impact upon the diagnosis, monitoring and prognosis of patients in the NHS. ■

Job Profile – Clinical Scientist (life sciences and laboratory medicine)

Clinical Scientists following this specialism are laboratory-based professionals, responsible for the analysis of physiological samples and the interpretation of results obtained from diagnostic tests. They use their scientific knowledge to prevent, diagnose and treat diseases. There are many different specialisms available within the life sciences and laboratory medicine field, such as clinical biochemistry, haematology, immunology, genetics and microbiology.

Responsibilities

Responsibilities include interpreting test results, closely collaborating with doctors and other medical staff to identify suitable treatments for patients and researching, developing and testing new methods of diagnosis and treatment.

Qualifications

A degree relevant to medicine or a life science discipline, depending on the chosen healthcare specialism, is required. Before working as clinical scientist, you need to complete a 3-year NHS Scientist Training Programme and register with the Health & Care Professions Council.

Salary and career development

Salary varies depending on experience: as a newly qualified clinical scientist, you can expect to earn £26,250–35,250 per year. As an experienced scientist, the salary will increase to £31,250–41,250 and it could reach £56,000 or above when you are highly experienced. Senior clinical scientists may move into management, teaching and/or apply to the NHS Higher Specialist Scientist Training programme.

More information on working as a clinical scientist

- www.healthcareers.nhs.uk/career-planning/study-and-training/graduate-training-opportunities/nhs-scientist-training-programme
- nationalcareersservice.direct.gov.uk/job-profiles/clinical-scientist
- www.hcpc-uk.co.uk/aboutregistration/professions/index.asp?id=4#profDetails



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