St George's
University of London

CLINICAL PHARMACOLOGY BSC

'Opening the door to a great career in the design, testing and use of medicines for the benefit of patients.'

CLINICAL PHARMACOLOGY BSC

So you are looking for an undergraduate course? You want something that is interesting and exciting for the next few years? And also something that will lead to a job that feels worthwhile and will help you get on your feet when you graduate? If this is you, clinical pharmacology may be just what you are looking for. Read on to find out why.

What is clinical pharmacology? Clinical pharmacology is the science of designing and testing medicines for use in humans. Clinical pharmacologists work at the meeting point between the laboratory and clinic, developing laboratory discoveries into medicines and identifying clinical problems that need investigation in the laboratory.

How can it lead to a job? There is a huge need for trained and skilled people to work in drug development. The Association of the British Pharmaceutical Industry (ABPI), which represents large, medium and small companies developing new medicines, has described the clinical pharmacologist as one of 'four scientists that save the world every day' and said that the UK needs more of them.

What could I actually do? So what do people who work in drug development actually do all day and could this be for you? Below are some examples of different jobs that you could do after you qualify. Some you could start straight away, others will need or will lead to more study such as a Masters or PhD. While studying for postgraduate qualifications you could earn about £14,000. Starting salaries are around £25,000 once graduated.

abpi
Bringing medicines to *life*

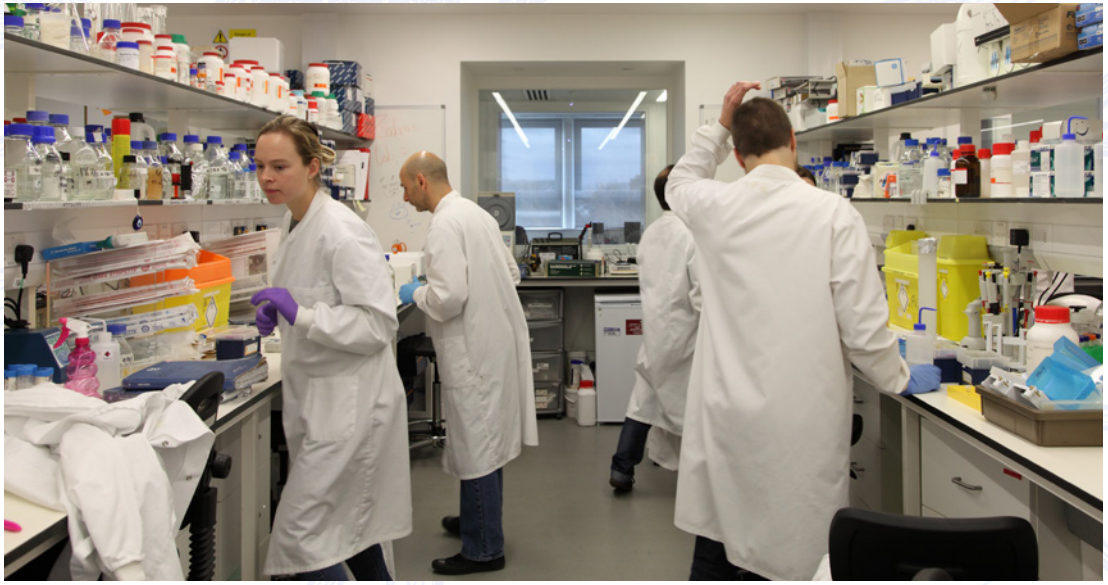
WORKING FOR A BIG PHARMACEUTICAL COMPANY DEVELOPING NEW MEDICINES

Clinical pharmacologists in big pharmaceutical companies work in teams to develop new drugs. Their role starts when the drug is ready to be tested in humans for the first time. They work on designing clinical studies and trials, analysing and interpreting trial results, making decisions at each step of the drug development pathway and getting the drug to the point where it can get a license to be prescribed in practice.

Day to day: Clinical pharmacologists analyse data, write documents, make scientific presentations, attend meetings, and interact with a wide range of people who do a wide variety of different jobs. They may travel, and big pharmaceutical companies are located worldwide. The job combines interesting science with the satisfaction of creating new treatments that can help patients. You will usually need further qualifications to progress in this career.

Laboratory scientists work in the earlier phases of drug development, finding out how drugs work in cells or tissues and doing preclinical testing to prepare the drug for testing in humans. They may work in big pharmaceutical companies but can also work in small or medium companies or universities.

Day to day: This job involves working at a laboratory bench doing experiments, making measurements, collecting and analysing data and writing reports. You could travel to present your findings or work in a laboratory abroad. You can start as a research assistant and develop by doing a masters and PhD.



'Pharmacometricians' are scientists that use computer modeling and simulation to learn more about the drug from data that has been collected so far and help answer questions, for example about the right dose of a drug to use at the next stage of testing.

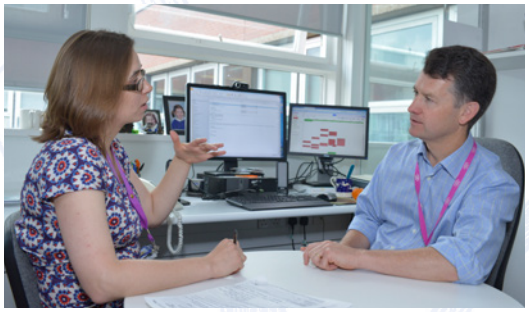
Day to day: Pharmacometricians spend a lot of time at their computers working with data. There are also lots of meetings and decision making and writing of reports. Pharmacometricians are an increasingly desirable commodity, so there is lots of opportunity to travel or to be paid well. However you will need to develop programming skills and get a PhD first!

WORKING IN CLINICAL TRIALS

Clinical trials are designed by big pharmaceutical companies or by academic investigators e.g. in universities. Pharmaceutical companies contract out the running of the trial to contract research organisations (CROs), who run them in clinical research facilities across the NHS and in private units. There are lots of different jobs in clinical trials working in CROs or the NHS.

Day to day: All people working in clinical trials work in teams, have a lot of people contact and manage and run interesting studies that develop new medicines. A BSc in clinical pharmacology will be sufficient qualification for entry into many of these jobs, although career progression may require further study.

Clinical trial coordinators manage the process of trials. Their job involves translating the research plan into practice so includes reading documents, making presentations, managing people, knowing the rules and regulations and making sure that the trials team sticks to these.



Clinical research associates take patients through trials. They find suitable patients, recruit them into trials and see them regularly to take measurements and collect information. Their job involves lots of people contact, clinical skills, data collection and management.

Data managers make sure that the right data is collected during clinical trials and that the data is accurate. This can involve designing data collection tools, liaising with the study team, monitoring and checking data entered and planning analysis.

Clinical trial monitors oversee the delivery of clinical trials and make sure they are done properly. Their day-to-day work involves visiting different sites, checking trial data against original records, making sure that the information collected is accurate and that research results give true information about a new drug so that they can be trusted when it becomes a medicine for patients.

OTHER CAREERS

- Working for regulatory bodies to ensure that drugs meet legal standards e.g. by studying documents, gathering information, making inspections, analysing complicated information.
- Working in marketing and sales e.g. in product and service development, research, communication projects, sales programs, customer relations and event coordination.
- Working in healthcare e.g. in technical services or procurement.

HOW WILL THIS DEGREE HELP YOU BE COMPETITIVE IN THE JOBS MARKET?

Our course will train you in clinical trials and laboratory skills, presentation and writing, data handling and analysis and expose you to the world of work through interaction with employers. When you graduate you will have a broad knowledge of clinical pharmacology and drug development and will be ready to start work in a wide range of interesting and rewarding careers.

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