

A day in the life of a Research Technician



Pooja Sridhar is a Research Technician within the School of Biosciences at the University of Birmingham. She works as part of a research group investigating bacterial protein structure. Pooja completed her undergraduate and postgraduate degrees in microbiology at the University of Mysore in India, followed by a brief teaching role at BMS college. Pooja then started working for a biotech firm before moving to England and taking up her current role as a lab technician. Peter Wotherspoon (Training & Careers Intern, Biochemical Society) spoke with her about her work.

How did you get into science?

I liked science at school from a young age and around year 10–11 developed an interest in pursuing it further. I didn't specifically focus on biological sciences at that time, but after looking at the various degree options I decided on doing undergraduate study in botany, biochemistry and microbiology. India has a slightly different system for undergraduate study than they do in the UK, which allowed me to pursue a number of subjects. After that I decided to go into postgraduate study in microbiology.

Can you describe a typical day?

It is hard to say what a typical day would be; most days are quite different. It varies depending on whether there are project students in the lab or not. If there are, I suppose a typical day would involve meeting with the students to ensure they understand what they will be doing in the lab before going on to conduct my own experiments as part of the research group, which in itself varies quite a lot. Aside from that, days can include liaising with lab managers, training people on equipment, managing equipment, maintaining stocks of chemicals and placing orders through the finance department. I also run the Analytical Ultra Centrifugation (AUC) facility which

primarily involves maintaining the equipment, setting up AUC experiments (see article by Demeler p.14 for further information on this technique), invoicing and ensuring all the paperwork for the facility is in place.

What's the most interesting project you've worked on?

Out of everything I'm currently working on I would have to say that it is research into the Mla pathway found in Gram-negative bacteria that I find most interesting. Mainly because this project started out as a side project and we had no real expectations for it but it turned out some pretty amazing results and is starting to give us an idea of how bacteria move lipids between membranes.

What is your advice for someone pursuing a career as a Research Technician?

I'd say that flexibility as a person is quite important, as well as the ability to get along with a lot of different people. You can't really do a lot of the work you have to do without building good relations with the people around you; research is about collaboration after all. An ability to multitask and being meticulous also helps. As far as getting on the career path in the first place, prior lab experience in any capacity helps a lot. You previously

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didn't need a degree but more universities and research institutions are looking for degrees nowadays so a degree in a relevant subject certainly wouldn't go amiss.

What do most people not realize about your job?

The most common misconception about technicians in general is that lab techs just make the stocks, pipette things and do exactly as they are told! In reality, we have a fairly big impact on conducting research and optimising experiments. We have an input into the process and progression of research, aside from managing the lab and equipment. There are many technicians who specialize in their field and/or run facilities.

What inspires you the most about your job?

Getting good results for one and then publishing the research and moving the field forward. That aside, one of the most inspiring things is having enthusiastic students come through the lab. Since I work in a university research lab, students come through a few times a year. It is wonderful to see them come into the lab initially not knowing much about the project and over time gaining enough confidence not only to work independently but to bring their own ideas to the table. When they put the effort in, think about the work and things go well for them, it can be quite uplifting. ■

For careers information from the Biochemical Society, visit <http://www.biochemistry.org/Education/Careers.aspx>

Job Profile – Research Technician

Research Technicians assist senior scientists in conducting, formulating, monitoring and coordinating experiments. They are employed by industrial laboratories, universities, government organizations and independent research organizations. Research technicians conduct work that forms the foundations for the advancement of science.

Responsibilities

Research technicians are responsible for performing the experiments and tests agreed upon between them and their employer, which includes prep-work and sourcing chemicals and equipment. They are also involved in recording and interpreting results. They must keep up to date with recent developments in their field, especially those relevant to their area of research. Research aside, they are expected to oversee and maintain laboratory equipment and are often responsible for ensuring that health and safety guidelines are adhered to.

Qualifications and key skills

Having a degree is not always required to become a research technician. However, where competition for positions is high, having a relevant degree or vocational qualification such as a BTEC Diploma or apprenticeship may be an advantage. Some employers ask for a relevant degree as a pre-requisite.

Required skills include good problem solving abilities, a commitment to care and detail when handling expensive technical equipment, good teamwork skills and the ability to write technical reports.

Salary and career development

Salaries for research technicians can depend heavily on your qualifications, ranging from £18,000 to above £30,000. Career progression can be towards the managerial side in larger institutions or with further study towards the research side.



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