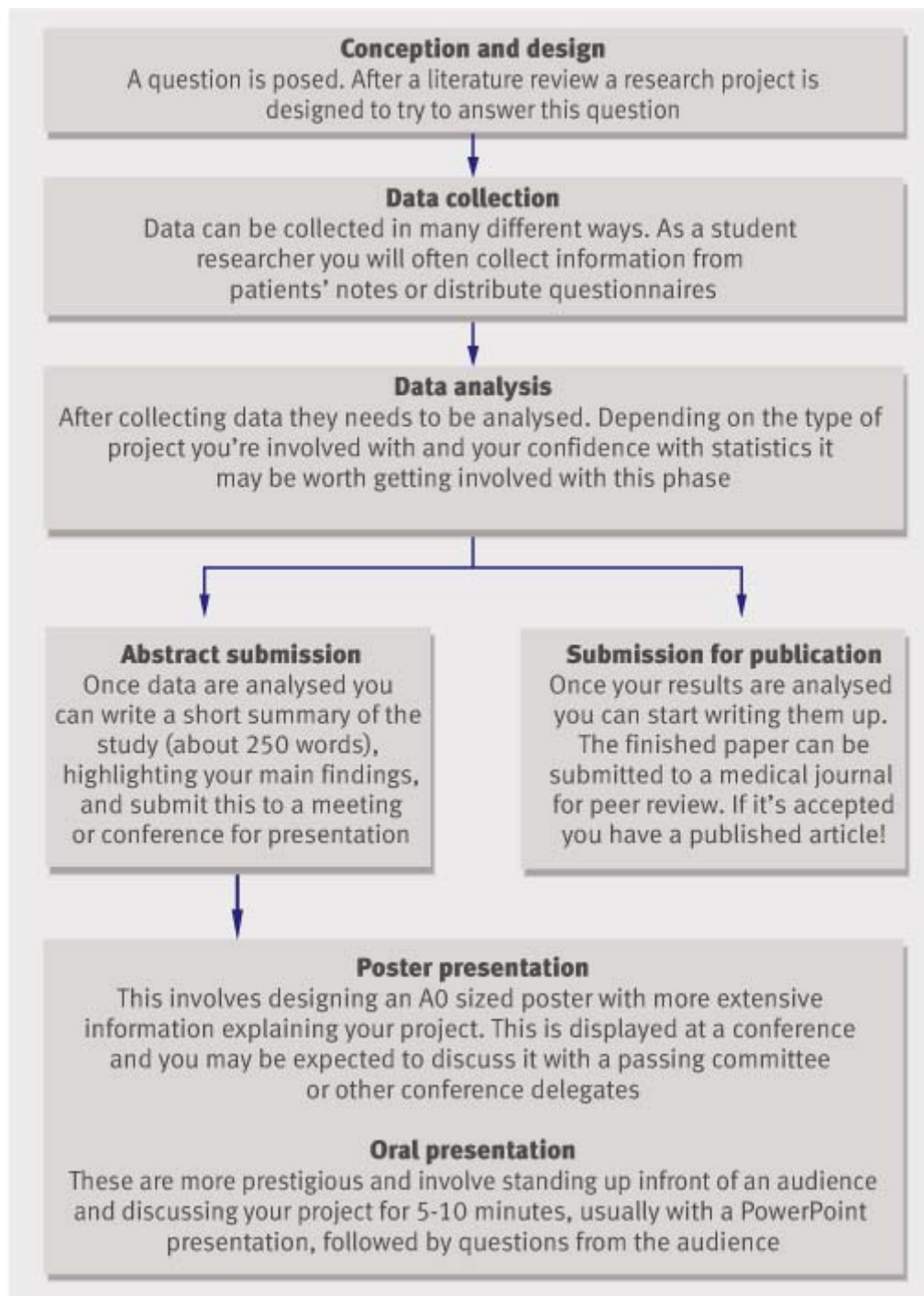


Research and audit

Opportunities to get involved start as a medical student

- **By:** Aimun A B Jamjoom, Ali Nikkar-Esfahani, J E F Fitzgerald
- **Published:** 01 February 2009
- **DOI:** 10.1136/sbmj.b202
- Cite this as: Student BMJ 2009;17:b202

Gaining research experience while at medical school is becoming increasingly important. The UK General Medical Council's guidelines *Tomorrow's Doctors* state that graduating medical students in the UK must be able to "evaluate and integrate evidence critically." Involvement in research can help medical students to acquire these essential skills while nurturing a deeper understanding in an area of interest. Even if you have no intention of pursuing an academic career it is still a valuable skill (figure [1](#)).



Taking a year out during medical school to undertake an intercalated degree is the most obvious route for formal student involvement in research. However, considering only a third of medical students intercalate research degrees in the UK, this leaves two thirds of students with no hands-on experience of running their own research or audit project. So here are a few tips on how to get involved at medical school.

Audit or research?—Audit is a good introduction to an academic project because these tend to be on a smaller scale and are easier to undertake as a student.[\[1\]](#) See “Research is concerned with discovering the right thing to do; audit with ensuring that it is done right” for the difference between research and audit.[\[2\]](#)

Getting started—There is no right time to get started with research. Opportunities range from finding a topic of interest to meeting a dynamic and enthusiastic doctor who encourages you to get your academic ball rolling. However, you should remember that from starting a project to seeing an outcome can take a long time. Depending on the size of the project, how long it takes you to do your part, and the keenness of your supervisor it may take from six months to a year or more before you have anything to show for it. So if the chance arises it may be better to start earlier rather than later.

Ask around—Finding the right person who will offer you the opportunity to do research or audit work can be difficult, and this is where most people struggle. The key to success requires a mixture of relentless questioning of doctors but also a little detective work. If you hear of a friend or colleague who's doing some work with someone try and find out their supervisor's name and inquire whether they have any other projects that they need help with. Doctors who are active in research tend to have more than one project going at once.

Clarity is the key—Once you've found someone who is willing to let you help them it is important for you to clarify a few points.

What exactly will I be doing?—It is important to make sure that your supervisor shows you exactly what you should be doing and how. The results of a study may depend on your work, so getting it right is vital.

How much support will I have?—It is easy for a busy doctor to leave you floundering with a mass of patients' notes and little idea about how to go through them properly. So ask how much he or she can help you.

What do you aim to get from this project?—The answers you will get can vary greatly. It's a good sign if your supervisor tells you exactly what his or her intentions are. This includes where they aim to present the study and whether they think the work could be published.

What is my contribution worth?—This is important and should be asked, however awkward it may seem. Different supervisors have different views on what medical students' contributions to projects are worth, therefore, it is essential to ask whether your hard work will result in your name on a submitted manuscript to a learned journal or merely a pat on the back.

Reading around your project—Once you have found a project to work on, it is important to read about it in journals and textbooks. This helps put what you are doing in perspective and refines your ability to critically appraise published papers, a vital skill for instilling evidence based practice throughout your future career.

Location—If you're doing a project that involves work in a hospital try to make sure that you are attached to that hospital for the duration of the project or live nearby—this makes life a lot easier.

Find a partner—Having a friend or colleague involved can help a great deal. This allows work to be shared but also means that you have someone to spur you on and keep you company.

Collaborations—If you find a good supervisor and a medical student you enjoy working with, keep with them. There is no need to stop at one project.

Effort—The roles you get will not be extremely time consuming and do not require as much effort as people often think.

Research ethics—It is unlikely that you will have the task of applying for ethical approval as a medical student. However, consideration of a study's ethics is fundamental to medical research, and you must ensure that your supervisor has considered this before undertaking his or her project. Local approval of clinical audits may also be required.

If all else fails—If you can find no one with any projects or every project you start gets nowhere, why not come up with your own idea and approach a doctor for supervision and guidance? Questionnaire surveys are simpler projects to undertake and don't necessarily have to involve patients (surveys of patients require ethics or audit committee approval). You could answer a question in medical education by distributing a questionnaire among medical students in your year.

Research can be very fulfilling but at times frustrating: do not let this deter you from getting involved with at least one project during your medical school career. The experience will help you to understand the work involved in providing evidence to help doctors improve patients' lives; allow you to tackle new and exciting areas through original and critical thought; and improve your abilities as a doctor.

Aimun A B Jamjoom
final year medical student

mzyyaaaj@nottingham.ac.uk

Ali Nikkar-Esfahani
final year medical student

J E F Fitzgerald
clinical research and teaching fellow and specialty trainee, general surgery

Competing interests: None declared.

Provenance and peer review: Not commissioned; externally peer reviewed.

See "Should I do an intercalated BSc?" (*Student BMJ* 2008;15:238-9, <http://archive.student.bmj.com/issues/08/06/careers/238.php>).

References

1. Janmohamed F, Halpin L, Patwardhan S. Clinical audits made easy. *Student BMJ* 2006;14:20-2.
<http://archive.student.bmj.com/issues/06/01/careers/20.php>
2. Smith R: Audit and research. *BMJ* 1992;305:905-6.