



MICROBIOLOGY CAREERS 7

Post-doc and beyond - aiming for a lectureship

A postdoctoral position is a transition from supervised research student/assistant to an independent researcher and involves acquiring many skills apart from those involved in your scientific research. If you enjoy university-based research you may well be considering a career as a lecturer. The competition for lectureships can be tough so it is worth finding out what makes a successful candidate.

Lecturers have two main roles: teaching and research. Prior teaching experience is useful but not always essential since all new lecturers attend training courses to develop these skills. However, before applying for jobs, a future academic should consider how s/he plans to build up a research group, how s/he will fit in with other research interests in a department and how s/he plans to attract funding.

Building your skills & experience portfolio

In addition to your research you should take full advantage of staff development training courses offered by university staff training units or careers services. You can also equip yourself with skills and experience that will demonstrate you have what it takes to excel as an academic.

Publications

Publications are the most important way of assessing the quality of a researcher. They show motivation to succeed. Journals have "Impact Factors" - publications in high impact factor journals are read by the widest audience. Identify which journals you should be targeting in your field - quality is more important than quantity.

Project planning/management

Your supervisor may need your help to set and supervise undergraduate/MSc projects. You can take the initiative by suggesting ideas and perhaps planning the projects. You can also offer to help with direct supervision of the student. This can be a way of starting to build your own mini research group.

Communication

Take every chance to present your work orally and in writing. Society meetings are an ideal opportunity to present work - offer to give an oral paper. Look out for competitions such as the SGM Young Microbiologist of the Year, which provide experience and a chance of winning a cash prize. Practise communicating at different levels e.g. undergraduate practical demonstrations and tutorials or explaining your science at university open days.

Motivation to succeed

Good ways to show motivation are: applying for research grants, going on career development courses, volunteering to give that scary talk at the big conference and networking at conferences.

Imaginative/creative thinking

It can be difficult to show evidence of this quality. Make yourself aware of the research going on around you, read widely and try to think laterally. With your supervisor's approval, take opportunities to branch out from your main research programme - making sure the key objectives are still met. When you apply for a lectureship, look at research interests within the department and identify possibilities of collaboration between you and existing staff.

Fundraising

This may be something to think about after a few years as a post-doc. You can apply for grants on your own initiative although, for some schemes, your supervisor usually has to be the named academic. Grants can support you or another researcher depending on timescales. More generally, you should make yourself familiar with the funding landscape in the UK, EU and overseas. Find out what sources of funding exist to support your research area.

General information

It can take two or three post-doc contracts to build up all the skills and experience you need. In the early stages of each appointment you should make a professional development plan with your supervisor. Universities have a commitment to postdoctoral staff development and should support you.

5 hot tips for the swiftest way to a lectureship:

- ▶ plan your personal development strategy
- ▶ think about the career stage after next
- ▶ take whatever professional development opportunities are on offer
- ▶ be aware of funding landscape and political developments affecting research in the future
- ▶ publish effectively and network wisely.

Further information

Microbiology Careers 2 Postdoctoral Research

Gradline, *Microbiology Today*, Vol 33, Feb 2006, (www.sgm.ac.uk/pubs/micro_today/pdf/020608.pdf).

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