

Gradline aims to inform and entertain members in the early stages of their career in microbiology. If you have any news or stories, or would like to see any topics featured, contact **Jane Westwell** (e j.westwell@sgm.ac.uk).

The Career Word



You are busy with your research and if you focus all your energy onto the work in hand the future will look after itself – right? ... Well not really, unless you have a fairy godmother who specialises in careers and, to be honest, they are fairly thin on the ground.

Luckily, universities, funding bodies, learned societies and professional associations all recognize the need to support scientists early in their careers and between them they provide a whole range of activities to support early-career scientists. We take a look at a few here that are particularly relevant to microbiologists.

R is for Roberts...

...or more precisely the late Sir Gareth Roberts who led a government-commissioned review of UK science and published a report in 2002. The Roberts review identified, among other things, a mismatch between the actual skills of graduate and postgraduate scientists and the skills employers wanted. The report recommended a range of measures to improve this situation. In response the Government made £20 million funding (Roberts money) available to implement a programme of activities. The emphasis for postgraduates being on employability and on career planning for postdoctoral scientists. So much for the brief history lesson – how does this affect you? Some of

the Roberts money was directed towards centrally funded activities, the rest was allocated to institutions with research council funded staff and postgraduate students. Your university almost certainly offers postgraduate skills training that was developed in response to the Roberts Review. Do you take full advantage of the courses and workshops that are on offer? Or do you reluctantly traipse along to one or two of them to keep your supervisor quiet? Maybe the programme in your university is not well publicised – if not, it is a good idea to check out what is available. A quick survey of university websites, revealed workshops on a range of topics including science communication skills, getting the most out of conferences, managing your supervisor and surviving your viva. These workshops may not seem directly relevant to your current situation and perhaps you view them as a distraction from your research. However, a PhD does not guarantee you a job and you can improve your employability by recognising and developing your transferable skills to present alongside your valuable research experience.

As a postdoctoral researcher, in an established and well-funded laboratory, it is easy to drift from one contract to another. Sometimes last-minute funding comes through and you can put off the inevitable decision

for another few months or years, but postdoctoral research is not a permanent career and has a fairly short shelf life. For this reason careful career planning is essential for contract researchers. If you work in a poorly funded area, you may not have the cushion of a well-resourced lab and it is even more important to develop a clear career strategy. Roberts money has funded a range of activities for contract researchers in universities. Some supervisors recognize their responsibility to research staff in their teams; others may be less encouraging. Whatever your situation, you owe it to yourself (and it is your right) to take every opportunity to develop your career.

UKGrad

A major initiative to support UK-based postgraduate researchers is UKGrad (www.grad.ac.uk). One of its most successful activities is the long-running programme of personal development courses for postgraduate students, commonly known as GRADSschools. There are two types of course: those organized on a regional basis and tailored to the needs of local students who can attend free of charge and, alternatively, national GRADSschools that are organized by the central office and take place at a number of locations throughout the UK. The courses last 3 or 4 days and offer a chance to take a step back from your research and focus on transferable skills such as networking, communicating and team-working. The courses give vital breathing space and participants have a chance to reflect on their experience and to start to think about career options. Most students return to their research feeling revitalized and with increased motivation.

Students who are funded by a research council or the Wellcome Trust are entitled to a funded place on a national GRADSschool. The SGM is aware that this leaves a large number of microbiology researchers with no obvious means of financing a place. As a result, the Society launched the GRADSschool grant scheme and since 2007 we have been offering postgraduate student members of the society grants to cover the full fees of a national GRADSschool course. Eligible students must have been members of the SGM for more than three calendar months, in the final or penultimate year of their studentship and be funded by organizations other than the Wellcome Trust or a research council. We allocated a handful of grants in 2007 and are hoping to see an increase in uptake in the coming year. It is a golden opportunity to attend a fabulous course, if you are eligible to apply for a grant you have nothing to lose – go for it!

GRADSschool participant comment:

'I was able to put my own research into perspective. I found working and exchanging ideas with fellow students really rewarding.'

SGM and you

SGM is committed to supporting career development of early career microbiologists and offers a range of activities.

For many years we have been closely involved with the Life Science Careers Conferences. In recent years SGM has taken a lead role in organizing the conferences and carries out much of the background work. In addition to this, last November Jane Westwell and Lucy Goodchild from the External Relations Office travelled to University of Leeds, KCL and University of Bristol where the events took place.

Undergraduate and postgraduate students from all branches of bioscience had the chance to listen to speakers from a variety of career pathways. Talks included R&D in the pharmaceutical industry, teaching in schools, IP management, planning for an academic career, clinical sciences and CVs, interviews and job hunting. Refreshment and lunch breaks gave an opportunity to network with the speakers, learned societies and employers. Some delegates took part in a CV clinic where they received feedback on their CV in a one-to-one session with an experienced reviewer. The SGM exhibition stand was laden with copies of *Microbiology Today* and our careers information sheets.

Regular attendees at the SGM Spring meeting will know that we always arrange a skills development session for early career microbiologists. 2008 will be no different and we will be running a session entitled *Postdoc and beyond – planning for an academic career*. We will focus on three main themes: getting published, getting funded and getting that elusive lectureship. After the presentations the speakers will be glad to answer questions from the audience and we expect that the usual lively discussion will follow. The evening will end with drinks and a buffet.

As you can see, there is plenty of opportunity to attend courses and workshops tailored to the needs of 21st century research microbiologists. These are only a starting point; there are also a number of websites offering advice, shared experiences and points of view. University career advisory services are often undervalued by postgrad and postdocs, but can be an excellent resource.

There is lots of support and advice out there just waiting to be used so why not make time for yourself in 2008 to think about where you are heading in your career.

Jane Westwell, External Relations Office

Useful websites

www.biocareers.org.uk – microbiology careers website
www.grad.ac.uk – UKGrad, resources for postgraduate students including information on GRADSschools
www.npc.org.uk – National Postgraduate Council
sciencecareers.sciencemag.org – articles, advice on all aspects of science careers



Science vs science communication – a fine balance



Gemma Walton is a postdoc at University of Reading. She has a keen interest in science communication and public engagement but hasn't yet made the decision to abandon research. In the meantime she takes every opportunity to have fun with the communication activities and gain useful experience.

Profile

Name Gemma Walton
Age 27
Present occupation Research Fellow (gut microbiology), University of Reading
Education University of Reading, *PhD Food Bioscience* (looking at whether prebiotics may offer some protection against colorectal cancer through changing the bacteria within the colon and their metabolic activities); Coventry University, *BSc Biological Sciences*.

Q *What appeals to you about communicating science?*

It's a great way to help people to understand why things happen. It's about taking concepts that people may not grasp and trying to relate them to life in a way that can be understood.

Q *How do you balance your research commitments with science communication activities?*

In a way the two can go hand in hand. The communications I have done to date have related to my research field – you have to find a little extra time to do these; but it's an enjoyable part of the work.

Q *You appeared on TV – how did that come about?*

My PhD supervisor was approached by the BBC to help with a programme in *The Truth About Food* series. He suggested I do it since I had some spare time after completing my thesis.

Q *What was it like being on TV?*

It was amazing! I was involved in the design of an experiment which essentially was feeding pre- and probiotics to a bunch of cowboys to look at their effect on gut health. I had to fly out to Colorado for some of the filming; everyone was really friendly, so I was very much at ease and it was great to see what goes on behind the scenes on a production. Back in Reading they did some more filming in the lab. Fiona Bruce interviewed me; she was also very friendly and down-to-earth, making it a great experience. I had plenty of opportunity to develop communication skills, especially in the US where pre- and probiotics are not well known.

Q *What else have you been involved with?*

In 2007, our research group was selected to display our research at the Royal Society Summer Science Exhibition. I was heavily involved in putting the stand together – from working with designers, editing the publicity leaflets, liaising with

suppliers to actually putting the display together on set-up day. The visitors were from all walks of life – from school children to retired professors. We had a lot of interest with many people wanting to know more about their guts. The great thing about promoting this topic is that everyone can relate to it.

Q *What transferable skills did you gain from this?*

The obvious ones are organization and communication skills, but I would say that I really developed my project management skills. Co-ordinating the timely production of the display material, freebies and accompanying literature was a massive task although my colleagues made a big contribution too.

Q *Have you taken up any training opportunities?*

During my PhD, I attended a Life Science Careers Conference to find out more about career options. I also took part in Royal Society science communication training course prior to the summer exhibition.

Q *What aspect of your work gives you the most job satisfaction?*

In terms of my research getting results in projects is very satisfying. But I do also really enjoy science communication tasks. Being able to do both of these things in one job is great.