Naturejobs Career View

GRADUATE JOURNAL

Leaving the family

My days in graduate school are numbered, and I'm not looking forward to the heartbreak of leaving my second family: my amazing lab group.

It's both a blessing and a curse that labs change people and flavours over the years. It's great to have new faces arrive with fresh perspectives and, especially in our lab, new recipes. Good skills at bench biochemistry often go hand-in-hand with good skills in the kitchen, and I've eaten some of the best food of my life in this lab.

It's hard to live in a dynamic workplace, though, when the family so often loses members as they move on. Sure, there will always be e-mails or phone calls, but the days of spontaneously running out for coffee, blasting gangster rap at 1 a.m. or playing a clever practical joke are over.

Now it is my turn to go and, although I won't miss the more tedious aspects of daily benchwork, I will miss the people who made the failures less painful and the successes more exciting. These people have been my cheerleading squad through thick and thin, in both my personal and professional life. Thanks for putting up with my neuroses, my dirty jokes and my pilfering of pens from your benches. The road to a PhD was long and a lot more fun with my second family.

Jason Underwood is a graduate student in microbiology at the University of California, Los Angeles. He will graduate in June.

SCIENTISTS SOCIETIES

Planning for a positive postdoc

f you want to give your postdoctoral position the best chance of being a success, you need a plan. That is one of the strong messages to come from a recent survey of US postdocs, conducted by Sigma Xi, the Scientific Research Society, in Research Triangle Park, North Carolina.

Over the course of a year, Sigma Xi assessed the productivity and workplace satisfaction of some 7,600 postdocs. Those who had sat down with their supervisors to draw up a plan at the start of their postdoc were more likely to have a happy and productive lab life, the survey found.

Specifically, the 72% of postdocs who made such plans were 40% less likely to be dissatisfied with their overall experience, 30% less likely to have had conflicts with their advisers, and submitted 10% more papers for publication in peer-reviewed journals per year than those who did not.

The details of the plan also seemed to make a difference. The 39% of postdocs whose plan covered not only what they would do, but also what their advisers would do, were better off still.

Why do plans make such a difference? One explanation is that they are effective time-management tools that can help you to work more productively. A well thought-out research plan can focus your efforts and stop you from heading down blind alleys or working ineffectually.

A plan can also prevent disappointment and misunderstandings by setting your own and your adviser's expectations at an appropriate level from the outset.

An alternative explanation is that plans may be a good indicator of

the quality of a lab's management. Ask yourself who is more likely to be a good mentor: someone who sits down with you to draw up a career and research plan or someone who just turns you loose in the lab?

Indeed, 69% of those with a plan — and 80% of those whose plans included details of what their adviser would do considered their advisers to be mentors, compared with only 48% of those with no plan.

So next time you are weighing up the pros and cons of a postdoctoral opportunity, you might do well to ask your prospective adviser about his or her management style. And you would certainly do well to check up on their track record for laying research and career plans for their postdocs.

Geoff Davis is the principal investigator of Sigma Xi's postdoc survey. postdoc.sigmaxi.org/results

VOVERS Hidde Ploegh, Whitehead Institute for Biomedical Research, Cambridge, Massachusetts



mmunologist Hidde Ploegh's career was helped along by a little bit of luck. As an undergraduate at the University of Groningen in the Netherlands, he was awarded a travel grant to work in Jack Strominger's lab at Harvard University. As luck would have it, this led him to the perfect place to uncover the molecular mechanisms of the immune system, and he has been

1997–2005: Professor of

immunopathology and director of the graduate programme in immunology,

Harvard Medical School, Boston, Massachusetts.
1992–97: Professor of biology, Massachusetts Institute of Technology, Cambridge, Massachusetts.
1991: Dean of graduate studies, Netherlands Cancer Institute, Amsterdam.
1986–92: Head of department of cellular biochemistry, Netherlands Cancer Institute, Amsterdam.

1984–92: Staff scientist, Netherlands Cancer Institute, Amsterdam.

fascinated by the field ever since. Ploegh's graduate years at Harvard set him firmly on his career path and exposed him to the latest technology. "People in our building were developing DNA sequencing techniques that we were able to take advantage of," he says.

Since then, he has been guided by his interest in biochemistry and immunology — seizing every available opportunity to pursue his research. This has allowed him to grapple with a wide range of issues from unravelling the intricacies of immune responses to foreign cells, to discovering how viruses manage to evade their host's defence mechanism.

Having returned to Europe, Ploegh's pivotal career move was probably his decision to leave a cancer institute in his native Netherlands and head back to the United States. He arrived at Massachusetts Institute of Technology (MIT), an experience he likens to being a sous chef suddenly given a pantry full of the best ingredients and access to any possible technique.

After a few years at MIT, he began an eight-year stint at Harvard Medical School as head of its immunology programme. But now he is moving to the Whitehead Institute for Biomedical Research. With its links to MIT, this constitutes something of a homecoming for Ploegh — especially as it was the chance to exploit MIT's strength in materials science that lured him to the Whitehead. "In my research, there is an increasing importance for chemistry, materials science and microfabrication," he says.

As for careers advice, Ploegh maintains that the best route to success is simply to satisfy your curiosity. "I've come to realize that the best students are not necessarily those who have the most clearly laid career path, but those who dive in and do the work for the sheer joy of it," he says.