

MOVERS

Neal Copeland and Nancy Jenkins, principal investigators, Institute of Molecular and Cell Biology, Singapore



1985-2006: Director, mouse cancer genetics programme, and head, molecular genetics, oncogenesis section, National Cancer Institute, Frederick, Maryland (Copeland).
Head, molecular genetics, development section (Jenkins)
1983-85: Associate professors, University of Cincinnati College of Medicine, Cincinnati, Ohio

Neal Copeland and Nancy Jenkins are a remarkable scientific double act, with some 700 shared publications in the decades since they met as postdocs at Harvard Medical School. They made their names working on mouse models of human disease at the Jackson Laboratory in Maine.

Now, after 20 years at the US National Cancer Institute (NCI), where they've built up a colony of 20,000 mice, this husband-and-wife team is moving to Singapore's Institute of Molecular and Cell Biology (IMCB). What's pulling them away from such a comfortable niche, in their 50s?

For a start, Singapore is investing heavily in bioscience, notably in the construction of Biopolis, a seven-building biomedical research complex. At the IMCB, which moved to new facilities in Biopolis last year, Copeland and Jenkins will be setting up a new cancer lab.

"We will be on the ground floor of something new and exciting," says Copeland. Decades of working together have created an easy-going harmony in which the two weave in and out of each other's sentences. Their closeness and many visits to Asia make the move less daunting.

"We've lived and travelled and worked together for more than 25 years," says Copeland. "We share an office..."

"Quite a small one..." says Jenkins.

"Most people would probably be divorced by now! You have to be compatible..."

"That doesn't mean we never yell at each other..."

"But it's worked out well..."

"... for us," Jenkins concludes.

They've made surprising moves before. They were the first molecular biologists to go to Jackson, where they fused molecular biology with mouse genetics. That led to a greater understanding of how cancers develop.

"The move there was risky," says Jenkins. Copeland adds: "A lot of our friends thought we were throwing our careers away: 'Why go into mouse genetics?'"

"They thought we'd disappear into the backwoods..."

"But it was the best thing we did. It shaped our careers."

Moving to the NCI was the next best thing, they say, and they're hoping Singapore will be the third.

Jenkins advises young scientists not to underestimate their fields. Developments such as transgenic mice and the mouse genome, which seemed like science fiction in 1980, greatly increased her and her husband's success.

"Have fun too," they add. "When it stops being fun, we'll probably retire."

Janet Wright

SCIENTISTS & SOCIETIES

Learning to teach

The role of teaching in the development of academic careers is often undervalued. Pre-eminence is afforded to research, and administration places growing demands on academic staff. Yet good teaching is part of a university's purpose, and fundamental to the fully rounded development of any academic practitioner.

At the University of Oxford, with funding from the Higher Education Funding Council for England, we are developing a Centre for Excellence in Preparing for Academic Practice. This will support postgraduate research students and contract research staff who intend to pursue academic careers and want to develop teaching skills.

Such support includes introductory teaching development courses and the opportunity to acquire a qualification. Students will have access to mentors and will participate in different modes of teaching. They will also be provided with the technological means to record and analyse their own pedagogical conceptions and techniques.

These programmes will be available to Oxford postgraduate students in all disciplines by 2010. Some departments, such as biochemistry, will bring their versions on-stream this year.

The centre's approach is grounded in the view that the development of teaching ability is itself a scholarly and

research-based activity, from which best practices can be informed and developed. During its five years of funding, the centre will aim to assist research postgraduates at Oxford, and to disseminate its research findings for use by wider audiences.

One critical research area concerns the ways in which strengthened teaching capabilities may enhance research skills and productivity. If it can be shown that, by professionalizing teaching as well as research competencies in the early stages of academics' careers, their abilities in both areas are improved, then there will be significant implications for young researchers, as well as for university managers seeking to promote research output within their institutions.

But even if the relationship between teaching and research turns out to be ambiguous or unproven, strong teaching standards will still be essential for the recruitment and retention of students. Sharper analysis of the teaching/research dialectic should prove valuable in shaping both career development and overall policy direction within universities.

Keith Trigwell is director, and Richard Arnold is manager, of the Centre for Excellence in Preparing for Academic Practice. For more information e-mail keith.trigwell@learning.ox.ac.uk

GRADUATE JOURNAL

PhD, take two

My first PhD attempt was not the experience I had imagined. Although I made great friends both in and outside the department, I was in the wrong lab. I had my own funding but felt like a slave: I could do only experiments I was told to do and could not choose my own course of research. I was forbidden to take a class in evolution because it wasn't "related enough". I founded a graduate students' association but was told to spend more time at the bench. Feeling demoralized and insignificant, I quit last year, six months after starting my PhD.

At first I was sent reeling: was this the end of my career? Was I a terrible scientist? Should I study something different? Genetic counselling, medicine, even philosophy? After a short stint as a waitress back home in Scotland, I went to Montreal to work as a research assistant in a small lab on the evolution of sex. I got to read as much as I wanted, design experiments and talk to my supervisor whenever I liked. No, I wasn't a bad scientist, and yes, science still excited me. I realized that I wanted to give a PhD another try.

I got married and returned to Britain, but the lessons I'd learnt were not forgotten. When deciding on a new lab, I made sure that both the department and supervisor were flexible, encouraging and accessible.

Here I am six months into my new PhD. This time last year I was desolate. Now I am full of hope. What will this year bring? Watch this space.

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