

TURNING POINT Jon Simons

Cognitive neuroscientist Jon Simons is a lecturer in experimental psychology at the University of Cambridge, UK; he arrived at Cambridge after a research fellowship at University College London. Simons recalls two pivotal moments in his career: a move to the United States, and getting his first grant.

When did you decide to do research into memory and the brain?

I've known I wanted to do research since high school. A career in research means you have a great deal of freedom to determine the direction of your own work. I don't think I'd be so good at a career in which I was told what to do every day.

As an undergraduate at Aberdeen University, UK, I was lucky to have a psychology lecturer who was very interested in talking about neuropsychology — this idea of studying patients with brain lesions or brain damage and looking to see what effect that damage has on their cognitive function. That's what first got me interested in the field.

How did going to Harvard University for your first postdoc affect your career?

It was a very formative experience. I was enjoying my PhD at the University of Cambridge, but knew it was a good idea to go somewhere different. An opportunity arose at Harvard with Dan Schacter, who uses imaging to understand how memory works.

Science in the United States is very different from science in the United Kingdom in terms of the opportunities and facilities. Easy access to magnetic resonance imaging scanners and patients with rare lesions or forms of dementia led to several projects related to how memories are stored and retrieved. The people who were expert in these facilities and resources had a strong interest in collaborating. All this resulted in a large number of papers. I got far more out of that year and a half than any similar period in the rest of my career.

What techniques did you learn?

Functional imaging was a relatively new field then [in 2000], but in Boston there were several fully operational scanners, and loads of people knew how to analyse that data with sophisticated statistics. Learning to use functional magnetic resonance imaging (fMRI) was something I wouldn't have been able to do in Cambridge at that time. I probably wouldn't have got a research fellowship in London without that experience.



Once you became a lecturer at Cambridge in 2007, how did you get your research started? It's a big change and responsibility. You feel it is your job to bring money into the department, as well as teach and produce good research.

Getting my first grant was important. It came 18 months after I joined Cambridge. It's a good moment because you feel like you're part of the department and contributing. But then the pressure changes and soon you've got to start thinking about the next one. There's no sitting back on your laurels.

The grant is from the BBSRC [Biotechnology and Biological Sciences Research Council] to try to understand processes involved in memory retrieval. We're trying to combine the spatial resolution from fMRI, which indicates where in the brain these things are happening, with the time resolution from methods such as electroencephalography and magnetoencephalography, which allows you to look very specifically at when things are happening.

How important is the Experimental Psychology Society prize you won last year?

It probably won't have a huge effect on my career, but it is important — it may affect how much government funding the university gets or how your peers see you. We spend lots of time working hard in the lab, but don't know if others think what we're doing is worthwhile.

Science funding in Britain has been frozen. Will this affect whether you stay?

A freeze means we'll be behind our international competitors. If the situation gets much worse, I would have to consider moving.

INTERVIEW BY KATHARINE SANDERSON

GRANTS Boost for agriculture

Plant geneticists and biologists at the University of California, Davis, have received US\$40 million from the US Department of Agriculture to lead two fiveyear projects and recruit roughly 65 PhD students and postdocs. Jorge Dubcovsky, a wheat geneticist at Davis, says that he and collaborators at 28 institutions in 21 states will use the funding to recruit around 30 PhD students and 20 postdocs to breed wheat and barley able to resist drought and disease and use nitrogen efficiently. A further 15 graduate students and postdocs will be recruited to help sequence and mine conifer genomes, says project head David Neale. Dubcovsky says that in view of a steady decline in plant-breeding training programmes, the projects will offer recruits a rare opportunity to gain skills in plant physiology, molecular breeding and bioinformatics that are in high demand at agricultural companies.

DISCRIMINATION

Employment rights

The eligibility of same-sex partners or spouses for health insurance and other workplace benefits is a major source of concern for gay, lesbian, bisexual and transgendered (GLBT) scientists who work in US states where their relationships are not recognized. The issue emerged at a gathering of 30 GLBT cell biologists at the annual meeting of the American Society for Cell Biology in Philadelphia, Pennsylvania, on 14 December. The participants advised GLBT applicants to seek jobs at private universities not bound by state laws, or negotiate higher salaries to cover partners' insurance costs. Applicants should disclose their marital or partnered status during negotiations, they agreed.

CONFLICT OF INTEREST NIH urged to create rule

The US National Institutes of Health (NIH) in Bethesda, Maryland, has been asked to create regulations for how its grantee institutions handle financial conflicts of interest, in a report released on 10 January by the Office of the Inspector General of the Department of Health and Human Services. The NIH said in a statement that it is considering the recommendation as it drafts rules, but gave no timetable; it has already proposed regulations addressing conflicts for individual researchers. A spokesperson declined further comment.