

Q&A

Leslie Vosshall, head of the Laboratory of Neurogenetics and Behavior at Rockefeller University, New York, this year earned tenure and a promotion to the position of Robin Chemers Neustein Professor. She tells *Nature* that the new post makes her eager to work harder and guard against resting on her laurels.

Now that you have tenure, what will motivate you?

Tenure is a time to worry, not to relax. The best scientists are always worried. As soon as you sit back and feel comfortable, that's when things start falling apart. I'm always concerned about whether I'm doing good work. Rockefeller is a place of excellence, and as a faculty member at an institution with numerous Nobel laureates, I'm at the bottom of the ladder, eager to earn respect.

How did you get interested in science?

In high school, I spent several summers working at Woods Hole Marine Biological Laboratory in Massachusetts. For decades, my uncle and a research partner set up an annual summer lab there. They needed someone to wash the glassware. By the second week they let me do experiments. I learned there were different approaches to science. Working with scientists was like the difference between studying art history and being an artist.

How did you decide on your research track?

As an undergraduate, I worked on isolated cells. A change came when I chose to study sleep by looking at day-night rhythms in fruitflies. It was the first time that I had looked at the entire animal. We used flies that are insomniac because of one gene. Looking at the entire organism was so different from the way I thought of biology that it got my attention.

How did setbacks with high-risk projects during your PhD and postdoc help you?

I learned that to tackle high-risk projects such as finding odour receptors in insects you

need support and patience from mentors and your academic institution.

My CV looks good, but it is punctuated by long periods of silence in which my mentors were patiently waiting for a breakthrough. I spent more than six years on my PhD, and produced nothing in the first five years of my postdoc at Columbia University, New York. I experienced character-building failure at every step. Most people wouldn't accept a five-year postdoc, but I believed that finding odour receptors in fruitflies was important and that eventually I would solve it. Once we found them, the reward was great. It positioned me for a faculty post and ten years of fun research exploring these unusual genes.

Despite your setbacks, you have received several awards. How?

I don't publish a lot of papers. I'm not a factory, pumping out widgets. I'm more of a boutique that puts out something nice once in a while. I haven't published a paper in 16 months. My awards are proof that people pay attention to what is in the papers, and are not simply a result of sheer volume.

How do you balance basic and applied science?

I work on mosquito biting behaviour and am trying to understand how and why they bite humans. I still do basic research, but I really enjoy using findings for more applied public-health problems such as preventing mosquito-transmitted diseases. There is a lot of open-ended discovery that



doesn't have a particular applied use, but when we find something new, I'm always thinking about how to use the information practically.

What is your biggest worry?

My biggest worry — access to high-quality childcare — was resolved by Rockefeller, because they provide it on campus. Beyond that, I want to pick the right questions to focus my time and energy on. Choosing a research topic is a gamble. If too many projects don't work it can be the end of your career, but picking things that are easy and boring can end your career too. I'm a contrarian. I like to choose problems that no one else works on. I have a formula: when I do a search for a potential research topic, I'll pursue only those topics that generate fewer than 100 papers.

How do you handle competition?

I try to manage competition intelligently so that it doesn't destroy anyone's career. My lab is open with its data. If we find out that others are on the same course, we either plan a co-submission with them, or, if they are really ahead, we'll change course. I don't like working in paranoid secrecy. I'll call a direct competitor and ask about their work to try to develop these compromises. I don't think enough people do this. I believe that competition is good, but if a project gets scooped it's destructive. It can hamper careers and waste taxpayers' dollars. ■

Interview by Virginia Gewin

IN BRIEF

Universities protest cuts

Students and staff at 100 universities across the United Kingdom staged on-campus protests on 21 June against proposed government funding cuts that they say would jeopardize jobs, salaries, courses and student admissions. The more than £1 billion (US\$1.5 billion) of cuts would be implemented over several years and are part of an emergency budget plan, released on 22 June, to reduce public spending. Details on the cuts' totals and where they will be made will be unveiled in October. Protestors were upset about possible faculty layoffs, lower salaries, higher tuition and reduced courses. The protests were organized by staff and student unions. At least 75% of UK universities would be affected under the budget plan.

NIH peer review laid bare

A video from the US National Institutes of Health (NIH) in Washington DC offers biomedical researchers a view of the peer-review process in grant applications. The NIH's Center for Scientific Review (CSR) released 'The NIH Peer Review Revealed' (see go.nature.com/UJfkfi) on 16 June. It shows how the agency assesses the more than 80,000 grant applications it receives each year. "Peer review is a black box and can be intimidating," says Don Lockett, CSR communications director. "When you see the process on video, it comes alive." The 15-minute clip shows actual reviewers analysing a mock application and covers changes to the grant system such as a shortened application. The video, with a companion piece called 'NIH Tips for Applicants', replaces an earlier version.

Call for more EU funding

The European Union's (EU's) Eighth Framework Programme should boost science-research investment to help the EU to leave the recession and build economic growth, says a group of 22 EU universities. In a June report, the League of European Research Universities (LERU), based in Leuven, Belgium, recommends that basic research get as much funding as applied research because only basic research can address as-yet "unknown societal challenges". It also calls for simpler grant reporting and audit requirements; in the current system, applicants must justify each expense. LERU warns that the EU is losing ground not only to the United States and Japan but also to China and India.