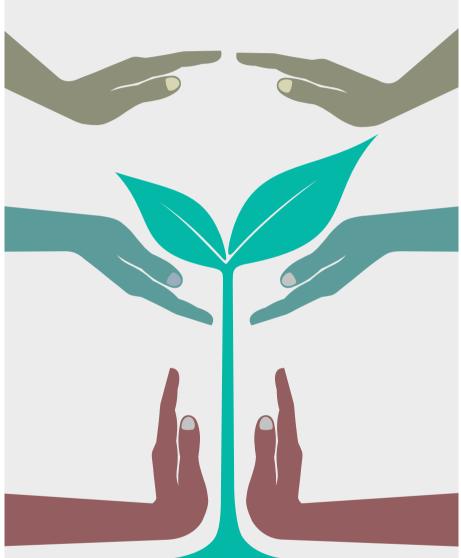


JOB SECURITY How having children can change your priorities p.306

BLOG Stories and more to help you reach career goals blogs.nature.com/naturejobs



MENTORING AWARDS

Leading by example

Nature announces this year's outstanding science mentors from the US west coast.



NATUREJOBS For the latest career listings and advice www.naturejobs.com

BY PHILIP CAMPBELL

er entire mentoring style is a gift to science." So said a nominator of Julie Overbaugh, an HIV researcher at the Fred Hutchinson Cancer Research Center in Seattle, Washington. And the judges of this year's annual Nature Awards for Mentoring in Science must have felt the same: they awarded Overbaugh the lifetimeachievement prize. They also awarded the prize for mid-career achievement, to biologist Susan Forsburg at the University of Southern California, Los Angeles.

Founded in 2005, the awards focus on a different region or country each year (see go.nature.com/2eejupo). In 2016, it is the US states of Washington, Oregon and California (see go.nature.com/2jwik45). Each contender has to be nominated by five of their former trainees, covering different stages of the mentor's career.

An important quality of the award winners is their ability to help protégés to reach crucial milestones. This skill, nominators say, is exemplified by Overbaugh.

"Given her success in the high-pressure environment of retroviral pathogenesis, it is remarkable that her lab has remained an outstanding training environment for graduate students," says one of her nominators. "She possesses the rare ability to work with her students to identify and develop projects that are relatively 'protected' from outside competition, yet retain enough scientific rigour to foster their development. It is hard to find a student of hers who has not published at least one significant contribution to the field."

Overbaugh shares with previous award winners the capacity to tune her mentoring to the protégé's individual personality and needs. "Julie has high expectations of her trainees and aims for all of them to develop the fundamental skills of a successful scientist," says the nominator, adding that Overbaugh does not expect trainees to follow her path into academia: many of them now have important roles in government, philanthropy and industry. "She recognizes each individual's strengths, weaknesses and goals, and figures out how to help them get to where they want to be," the nominator says. "The breadth and diversity of roles that her mentees currently fill is a testament to this style of mentorship that is rare even among successful academic mentors."

Another of Overbaugh's nominators **>**

TRADE TALK Drug referee



Steffen Schulz was completing his PhD in medical neuroscience at the Charité university hospital in Berlin when he realized he wanted more job security than academia could offer. He is now a

drug-safety manager at a pharmaceutical company in Germany.

Where do you work?

I'm based in Berlin. I grew up, studied for my diploma and did my PhD here, and I'm still in the same area.

How did you get your job?

I actually got it before I finished my PhD. My wife was pregnant with twins and I didn't want another fixed-term contract or to be forced to move anywhere. I considered a postdoc, but that felt like a stopgap. So I applied for work at a large pharmaceutical company, and started a trainee position there before I submitted my thesis. Since then I've been made permanent, and then promoted.

What do you do there?

In the drug-safety department, we take messages from physicians, pharmacists and patients about side effects from our company's drugs. I record and analyse that feedback, evaluate the benefit-to-risk ratio and see if any changes should be made to the patient-information leaflet or if we need to do something more dramatic.

Such as?

The serious side effects are reported directly to health agencies — Germany's Federal Institute for Drugs and Medical Devices and the European Medical Agency. They can withdraw a drug from the market.

What would you tell people who want to move out of academia?

You can't apply early enough — it's worth trying even before you submit your thesis. Be aware of the different options. I hadn't heard of drug safety before I saw this job. And know your skills — most PhD students don't realize that they already have a lot of experience. Even managing experiments is a form of project management. That's valuable.

INTERVIEW BY JACK LEEMING

This interview has been edited for length and clarity. For more, see go.nature.com/2fv6p2s speaks highly of her engagement with students from other countries, especially through her collaborations in projects based in Kenya. "She has an excellent capability and patience in guiding international scholars," this nominator says. "She has the patience to listen to and deal with culture shocks and adjustment to new surroundings and a different system of training and education."

Excellent mentoring can take different forms, as Forsburg's trainees have found. Imagine you're a graduate student who is frustrated by your lack of progress in understanding a protein kinase. Meanwhile, a talented postdoc in your lab characterizes a new role for it that leads to a strong paper. You're envious, embarrassed that none of your own work is included in the paper and express your frustration to your supervisor. What happens next?

A student mentored by Forsburg faced precisely this issue. What was Forsburg's advice? "Susan took a firm and constructive stance with me — challenging me to be more deliberate in my work, and to use my postdoc colleague as a role model," says the student, who was one of Forsburg's nominators. "She didn't give me any easy answers, but instead gave me a role model and higher expectations. At the same time, she also gave me more time and attention to help me think through my work, and encouraged the postdoc to mentor me to better set me up for success."

This is one of many examples of how Forsburg rises to the challenge of nurturing the career progress of younger scientists. She has gained a scientific reputation in pioneering the use of single-cell analysis and live-cell imaging by investigating mechanisms that maintain genome stability during stresses in replication, using fission yeast as a model system. But she was recognized for her strong role in helping undergraduates, graduate students and postdocs to fulfil their scientific potential.

Forsburg was a stand-out nominee, according to Lisa Coussens, chair of the judging panel and of the cell, developmental and cancer biology department at Oregon Health & Science University in Portland. She says that Forsburg not only strongly mentors members of her own laboratory, as evidenced by anecdotes and testimonials from her nominators, but also engages with mentoring challenges on a grander scale.

As a prominent advocate for women in science, Forsburg maintains a career-oriented website, Women in Biology (www. womenbio.net), which provides information on career management for female scientists and young science professionals. She has also written many columns for the 'Women in Cell Biology' feature of the American Society for Cell Biology newsletter.

Another of Forsburg's nominators says that the biologist treats junior researchers in her lab as much more than available labour.



S. L. FORSBURG



Julie Overbaugh (top) and Susan Forsburg won this year's *Nature* mentoring awards.

"She helps students take a formal, logical approach in trying to understand problems and develop options to solve them, having students develop robust hypotheses and likely outcomes of experiments before performing them," the nominator says. "This approach requires students to take intellectual ownership of their work and creates students that are trained to think as opposed to 'skilled pairs of hands."

The nominator also notes that Forsburg encourages her protégés to broaden their scientific perspective. "Susan's expectation is that lab members should have a working understanding and ability to contribute across all areas," the nominator says. "This will give her lab members greater ability to understand and pursue surprising or novel results."

Outstanding mentors share many qualities (see *Nature* **447**, 791–797; 2007). To judge from their nominations, both of this year's winners of *Nature*'s mentoring awards are no exception. ■

Philip Campbell *is editor-in-chief of* Nature.