

MOVERS

Carla Shatz, director, BioX, Stanford University, Stanford, California



2000-07: Professor and chair, Department of Neurobiology, Harvard Medical School, Boston, Massachusetts

1992-2000: Professor of neurobiology, University of California, Berkeley

1978-91: From assistant to full professor, Stanford University, Stanford, California

Carla Shatz has blazed a trail of firsts for women in neuroscience. Along the way, she has mentored a number of female scientists. She thinks that most girls are interested in science, but many simply lose interest under pressure from society.

After a chemistry degree from the Radcliffe Institute for Advanced Study at Harvard, she received a Marshall Fellowship to University College London and spent the next two years learning about physiology and biological systems.

Shatz returned to the United States to receive the first doctorate in neurobiology from Harvard — in part because she thought the move would offer broader opportunities. Being mentored by David Hubel and Torsten Wiesel, who were conducting Nobel-prizewinning science detailing how the brain is wired, made it an even smarter move.

"I got interested in this incredibly beautiful computational machine, and I wanted to see how the heck it was wired up during development," she says.

For her first job, Shatz's strategy was to go to the place that really wanted her. When Stanford University came calling, Shatz accepted. There, she became the first female basic scientist to be granted tenure at the medical school.

After 13 years at Stanford, she spent the next eight at the University of California, Berkeley, where she tried to establish an interdisciplinary neuroscience institute. Frustrated by a lack of administrative support, Shatz accepted an offer to be the first woman to chair Harvard's neurobiology department. "I couldn't turn it down because I felt I was on a mission to represent women at the highest levels of the university," she says. But she says the competition for space and resources were difficult to handle.

Having always hoped to return to Stanford, Shatz will soon be leading its BioX programme, which merges science, medicine and technology. Stanford neurobiologist William Newsome describes Shatz as an ideal leader for BioX because she has used a host of approaches — from anatomy to molecular biology to physiology — to show that brain development is not solely under genetic control. Shatz says that she sees her biggest challenge as integrating BioX with other departments.

Former colleagues eagerly await her return. "BioX already has fruit, but Carla will grow that tree and expand its influence," says Susan McConnell, a former graduate student of Shatz, adding that one of her many exceptional talents is facilitating long-lasting communities. ■
Virginia Gewin

MENTORS & PROTÉGÉS

Award-winning commitment

Walter Dodds, a biology professor at Kansas State University in Manhattan, likes to do research and to analyse data, but he likes encouraging his students even more. This year, the university's biology graduate student association presented Dodds with the Outstanding Graduate Faculty award. Among the criteria for this honour were teaching skills, mentorship, the cultivation of learning opportunities, participation in graduate student committees and publication and grants record.

Dodds teaches limnology and aquatic and microbial ecology, sciences that arouse his enthusiasm in the classroom and on field trips to nearby streams in the Konza Prairie. His contagious zeal makes learning come naturally.

Dodds says his goals are to "nurture a love for scientific research", and "make students successful in their career paths". Students find this fosters a passionate and professional attitude towards their work. As well as serving on almost every committee of students whose research relates to aquatic ecology, Dodds recently worked with other faculty members to create a course on professional skills in biology — a core requirement for incoming graduate students.

"His door is always open for us,"

says one of the many students who wrote in to support Dodds's nomination, adding that he "keeps in touch with his past students, meeting up for dinner at conferences".

Other supporters note that Dodds is always eager to work on field trips and lab demonstrations — even in cleaning up — and that he strives to end all his graduate courses with a publication that lists all students as authors. Quick to stem the tide of self-doubt that engulfs all graduate students at some point, he is understanding and flexible towards their family lives. During hours off, he invites students to the pub, or to enjoy his harmonica-playing in the locally renowned Red State Blues Band.

Dodds's professional accolades are impressive. His research has so far secured several million dollars in extramural support for the university, and his long list of publications documents a robust career of quality science. It was not his career, however, that prompted so many letters of support to the award committee. It was his intangible knack of mentorship, the ability to convey to students the idea that, in fact, they are his finest achievement. ■

Ron VanNimwegen is a PhD candidate in biology at Kansas State University.

POSTDOC JOURNAL

Loose ends

My PhD supervisor once told me that your thesis is never really completed. Given that his PhD, like mine, involved palaeomagnetic measurements of crustal deformation in New Zealand, I had good reason to believe him. Indeed, I've discovered for myself that an academic move hasn't meant a completely clean slate, because I've brought a fair amount of unfinished business with me to the Southern Hemisphere for my postdoc.

Some of this was unexpected — it turns out that the small matter of 5,000 miles hasn't stopped some students I'd been supervising from soliciting my advice. But I also find my old research still claiming my attention. I have papers on New Zealand tectonics and the growth of magnetic minerals in marine sediments to correct, finish or even start writing, and I still find myself adding new papers on these subjects to my to-read pile.

Having more publications is nice, but this is not my only motivation: I'm also convinced that the best way to develop as a researcher is to move away from a single-minded focus on one project, and keep several lines of inquiry open. This means following up on the questions raised by my past research as well as my current project. Who knows, maybe one day I'll also find myself supervising a PhD... using palaeomagnetism to measure deformation in New Zealand. ■

Chris Rowan is a postdoc in the geology department at the University of Johannesburg, South Africa.