

Q&A

Biophysical chemist **Nadine Gassner**, associate director of the University of California at Santa Cruz's Chemical Screening Center, has won the Ellen Weaver Award for mentoring, from the Northern California chapter of the Association of Women in Science.

Who were your first mentors?

My mother, a professor of education, and my father, a geneticist, were extraordinary mentors. They had a generosity of spirit that prompted them to reach out to students and colleagues. And, as an undergraduate at the University of Minnesota, I was mentored by Clare Woodward, a biophysical chemist who created mentoring programmes for women and under-represented minorities. I worked with her as she recruited and mentored disadvantaged women from Chicago high schools. Woodward crafted an environment to boost their self-confidence and self-esteem. Early on, she had them go to dinner with seminar speakers to learn how to interact in a collegial manner and build networks.

Did those experiences shape your own career?

Yes, they enhanced my scientific creativity and productivity. For example, many of the women had family members affected by the diseases we were studying, such as HIV and hepatitis C. They, Woodward and I had a dynamic ongoing conversation about how to tackle these diseases, which challenged me to learn ways to be more creative. Science is competitive, but mentoring taught me how important it is to have a mindful generosity of spirit in both work and life.

What programmes have you developed?

In graduate school at the University of Oregon, I organized a career-development group for women that combined mentoring with the challenges and joys of hiking and climbing mountains. Mentors and students would

go on hikes at least once a month. While hiking, we'd discuss our dissertations or problems in the lab. As a postdoctoral fellow at

Stanford University, I mentored graduate students through the Association for Women in Science, and taught workshops at the Expanding Your Horizons conference, which nurtures women's interest in science and mathematics. At the University of California, Santa Cruz, I mentor and advise undergraduate and graduate women in my research laboratory and conduct frequent tours and workshops for minority-outreach programmes.

What attracted you to biophysical chemistry?

I was always interested in how molecules are actually miniature machines. I wanted to know about the forces that make biomolecules work.

Did one pivotal decision alter your career?

After my postdoc, I chose to maintain work-life balance by seeking a more traditional schedule, which led me to my current role. My decision not to pursue tenure track led to a position that allows a level of collaboration I wouldn't have otherwise experienced.

Do you have an objective as associate director?

Chemistry is still a male-dominated field. In our department of chemistry and biochemistry, there are only two women professors out of roughly 24. My goal in developing the Chemical Screening Center was to create a place where any scientist, especially women,



can thrive and find their voice. People flock to labs with that kind of community.

How has this position affected your

creativity?

It has most definitely increased it. Synergies get built because we are privy to everyone's research and can facilitate interactions that might lead to a beneficial collaboration. It's a wonderful Crockpot of creative energy where researchers from disparate fields start talking and working together. I'm in the middle, a really exciting place to be. My interactions with all of them help me develop new questions and new approaches to experimental design and assay development. I love my job because I'm involved in more collaborations than if I just ran my own lab.

What do you do when you hit a roadblock?

I try to embrace that failure because it's an opportunity to get insight. I ask for feedback, often from past mentors and mentees. Quite often in my career, taking that moment to pause and reflect has illuminated a new direction. It's also a way to maintain resilience and not get stale. For example, my career started in the realm of protein folding, where my experience with protein structures and their binding abilities helped me later to develop assays to screen for inhibitors that could be used in drugs for neglected diseases or cancer.

What's your best advice?

Seek out criticism and use it as inspiration for your next step. ■

Interview by Virginia Gewin

IN BRIEF

The rise of San Diego

The biotechnology and pharmaceutical sector in San Diego, California, has grown substantially in the past two years, according to a new report. *The Recession's Impact on San Diego's Technology Industries* by the National University System Institute for Policy Research (NUSIPR), an independent think tank in La Jolla, California, found that there were about 19,900 biotechnology and pharmaceutical employees during the first quarter of this year, up some 10% from 2008. W. Erik Bruvold, NUSIPR president, attributes much of this to growth at private science institutions, such as the Salk Institute, due largely to government stimulus funding.

Portal of opportunity

The Federation of American Societies for Experimental Biology (FASEB) launched a web portal (see go.nature.com/SzZiya) on 16 April for resources and programmes that benefit under-represented minorities and women. The umbrella organization for 23 biology-related societies, based in Bethesda, Maryland, is collecting information such as how to meet mentors, get travel fellowships or find outreach programmes. Some sites are aimed at minorities and women. Others, such as lists of mentoring programmes, serve all early-career scientists. "It's important the workforce has as wide a range of viewpoints and backgrounds as possible," says Jennifer Hobin, FASEB's associate director for scientific affairs.

Investing in jobs

A US\$825-million influx of venture capital early this year is likely to create research positions at US biotechnology companies in the next three to six months, says a partner at a firm that co-authored a new investment report. Professional-services firm PricewaterhouseCoopers (PwC) and the National Venture Capital Association found the amount invested was 33% higher than in the first quarter of 2009 and more than was invested in any of 16 other sectors analysed in the document. Biotechnology has been the industry leader for such investment in the past year, says Tracy Lefteroff, global managing partner at PwC, based in London. Biotechs have improved their technologies, he says, enabling more effective development of drugs and creating opportunities for researchers.