

TURNING POINT

Joanna Wysocka

A Polish-born stem-cell biologist at Stanford University in California, Joanna Wysocka won the Vilcek Prize for Creative Promise in Biomedical Science on 1 April. The prize recognizes immigrant scientists who have made a contribution to US society.

Why did you come to the United States?

When I was still at university, I got a volunteer position working for a summer at Cold Spring Harbor Laboratory in New York while visiting my then boyfriend (now husband). I worked with different researchers, and Winship Herr, a molecular biologist working on gene regulation, invited me to come back for a PhD.

What was the defining moment of your PhD?

My research led me to work on chromatin, the DNA and proteins that make up chromosomes. It was an exciting time because related enzymes were being purified and published every few weeks. I decided to do a postdoc with David Allis, a biologist at the Rockefeller University in New York, after seeing him give an exciting talk on chromatin.

How did that affect your career?

David has never lost his childlike drive for doing science. His career path reinforced my idea that you should do what is interesting to you, no matter what others think. He was working on modifiers of the chromatin component histone at a time when most people would have considered them boring structural proteins. But his discoveries opened up the field of chromatin regulation.

How did you make a name for yourself?

As a postdoc, I discovered that a structural fold found in human proteins, called a PHD finger, can interpret modifications of histones. Since then, hundreds of papers have been published on PHD fingers that recognize different histone modifications — shedding light on everything from basic biology to diseases.

Why did you decide to work on stem cells?

When I started my assistant professorship at Stanford in 2006, a lot of my colleagues anticipated that I would continue my postdoc work. But I wanted to understand how functional complexity arises from a single set of instructions: the genome. That means understanding development, and stem-cell models offered a way to do that.

Was that a daunting move?

It was risky. It took three years to publish



the first papers, and my start-up money was almost spent. But having those start-up funds made it a perfect time to try high-risk projects. If I had followed up on my postdoc work, I probably would have published faster, but I have no regrets. I'm glad I had that freedom.

What motivates you?

I'm addicted to discovery. There is this moment when we get a glimpse of an interesting result, when we don't understand what is going on. I live for those moments.

Do you do anything to hone your creativity?

Yes, it is important to me. I make a conscious effort to do the most interesting next experiment, not the obvious one. I also make an effort to hire people with backgrounds including cell biology, development, biochemistry, physics and structural biology to foster a creative environment.

What is the most important lesson you have learned about running a lab?

When I started, I didn't know how to maintain an appropriate distance from my students to be an effective leader. But I realized that students need guidance more than a friend.

What is it like to get the Vilcek award?

It's fantastic because the prize is for immigrants. I received it around the time that I was awarded tenure, so it has been a time of reflection. We are always caught up in the next paper or grant, but the award made me step back and think that I came here 15 years ago with a single suitcase, got tenure at Stanford and made a career in my adopted country, which has been very generous to me. ■

INTERVIEW BY VIRGINIA GEWIN

OUTREACH

Science advocate post

Two US bills introduced on 8 May, one in the Senate and one in the House of Representatives, would create a national post to promote science education and scientific achievement. The Science Laureate would be a working researcher who would talk to citizens about science's crucial role in the economy and the need for financial support, says Nathan Click, a spokesman for Senator Mazie Hirono (Democrat, Hawaii), who is a co-sponsor of the Senate bill. "If the public begins to value basic research, that percolates up to lawmakers," says Click. The laureate would also present highlights from his or her own work to inspire young people to pursue science degrees. "We want to get students and communities energized about cutting-edge research and give them role models," says Click.

CONNECTIONS

Network for success

Early-career researchers and entrepreneurs benefit from strong online social networks, finds a study published earlier this month. Peter Gloor, who studies innovation at the Massachusetts Institute of Technology in Cambridge, and his colleagues analysed the LinkedIn, Facebook and e-mail networks of thousands of US and Swiss researchers and entrepreneurs (P. A. Gloor *et al. Int. J. Organ. Des. Eng.* 3, 67–85; 2013). Those with extended networks that included contacts who were eminent in their fields were most successful according to measures such as publications, grants and venture funding. "Networking is crucial," concludes Gloor.

GENDER

Credit check

Women who collaborate with men on managerial activities undervalue their own roles, says a study released on 7 May (M. C. Haynes and M. E. Heilman *Pers. Soc. Psych. Bull.* <http://doi.org/mh8>; 2013). Researchers got 330 students to perform tasks such as making staffing decisions with a simulated partner. Women generally gave male but not female partners more credit than they gave themselves — unless they were told that their own work was crucial or well executed. Women who devalue their contributions could be unlikely to seek out roles such as lead investigator on a large collaboration, says co-author Michelle Haynes, a psychologist at the University of Massachusetts Lowell.