

# TURNING POINT

## Jessica Hellman

M.CASHORE

Conservation biologist Jessica Hellman studies the effects of climate change at the University of Notre Dame in Indiana. She was inspired by her one-year fellowship from the Aldo Leopold Leadership Program in Stanford, California to do something that few scientific laboratories do — create a mission and vision statement for her research group.

### What is the best piece of career advice you have received?

My PhD adviser was Paul Ehrlich, a population biologist at Stanford University, and a public face of science. I studied with him because I wanted to have something to say about natural-resource management or how to deal with climate change. He was an ideal role model. But what he told me, and what I tell my students now, is “it’s all about science”. Concrete data, experience and knowledge are what give you a voice in the public sphere. If you bring nothing substantial to the table, you are just another voice.

### You have a fear of being labelled a ‘butterfly person’. Why?

I examine how climate change affects endangered species — an issue that has an inherent complexity because of the dynamics of temperature effects and species interactions. One of the species I’ve studied is the endangered Bay Checkerspot butterfly (*Euphydryas editha bayensis*), which runs out of food when high temperatures or drought cause its host plant to dry out. I don’t want people to miss the point: I study butterflies not because I am more fascinated with them than with other creatures but because, with so much data available, they serve as a useful proxy for insects in general. But one thing I learned from my leadership fellowship is to be comfortable in my own skin and recognize what distinguishes me as a researcher — I’m learning to embrace my inner butterfly.

### Why are you trying to ‘brand’ your research?

There are two dimensions to branding: communicating to the world who you are and what you are about, and helping you to decide what you want to be doing. I wanted to be the person to study how populations are locally adapted to climate, which my group does.

### Do you think every scientist should brand themselves?

I think it is a worthwhile exercise. When we first hire a researcher, we want a solid idea of who they are going to be, and it is important



for them to think strategically about how they can set themselves apart — so it is helpful to develop a plan that makes that clear.

### Why did you decide to write a mission and vision statement for your laboratory?

I wanted to know who we were as a group and what we should focus on. Once you get tenure, there are a million things to do — collaborations, committees and grant applications to write. I decided that one way to be thoughtful about our work, and what to work on, would be to collectively write our mission and vision. I found some instructions and group exercises aimed at businesses, and then we had a retreat to strategically discuss how we could match our strengths, priorities and goals for making our research relevant to larger issues. We’ll put a copy in the lab for new students.

### Will you continue to have retreats?

Yes. My research group should have regular retreats. We have lab meetings to talk about science, but retreats focus on broader topics, such as professional development. I want to brainstorm with everybody about what they can be best at. Retreats are also a great way to build morale. Everybody wants to be part of something.

### Why did you start blogging and tweeting?

I want to make science relevant to the rest of the world, be it landowners or government agencies — but I want to do it with transparency and honesty. Social media opens the shop doors a bit more. I would never tell students that their time is better spent on a blog than on a published paper, but it is a great way to be more open. ■

INTERVIEW BY VIRGINIA GEWIN

## WORK-LIFE BALANCE

### Stress survey

Scientists’ work obligations conflict with their personal lives three or more times a week, finds a poll of 4,225 scientists by the Association for Women in Science (AWIS) in Alexandria, Virginia. A third of respondents to the global work–life satisfaction survey said that achieving work–life balance damages their careers. “There’s a lot of stress out there; it’s global and not gender-specific,” says AWIS past-president Joan Herbers, who blames the dissatisfaction in part on rigid tenure timelines and requirements. Extending the tenure clock to allow for birth or adoption, and asking tenure committees to rate candidates on the basis of their publications’ impact rather than total number, would ease stress, says Herbers.

## ACADEMIA

### Increasing salaries

Faculty members at US doctorate-granting institutions received an average 1.7% salary increase for 2011–2012, 41.7% higher than the average 1.2% the previous year, according to a survey of 224,693 faculty members at 813 four-year colleges and universities. The survey conducted by the College and University Professional Association for Human Resources in Knoxville, Tennessee, found that faculty members at public doctoral institutions received a 1.2% average pay rise for 2011–2012, three times higher than the year before. Private institutions awarded a 2.4% rise for 2011–2012, up from last year’s 2.2%. Assistant professors in biology and biomedicine earned US\$59,907 in 2011–2012, and those in physical sciences earned \$58,771, up 2% and 2.3%, respectively.

## RESEARCH

### NASA to award grants

As part of an inaugural space-technology research programme, NASA is seeking grant proposals from early-career scientists. Ten researchers in areas such as communication and navigation systems; materials, structures and mechanical systems; and human health, life support and habitation systems will receive up to US\$200,000 per year for up to three years. The programme aims to improve its future space-exploration and discovery capabilities by focusing on early-stage research and seeding innovation, says a NASA spokesperson. Notices of intent to submit are due on 30 March and the deadline for final proposals is 3 May.