TURNING POINT Kristin Laidre

Kristin Laidre was on her way to becoming a dancer until an ankle injury altered her plans. Now a marine biologist at the University of Washington in Seattle, she studies polar bears and narwhals in the Arctic, and has found ways to combine her love of the arts with science.

Did you have an early interest in both dancing and science?

Yes. I grew up with an art-teacher mother in Saratoga Springs, New York, a summer spot for opera singers, ballet dancers and other artists. Surrounded by the arts, I got involved in ballet as a kid and after high school continued performing, eventually with a dance company in Seattle. At the same time, I was a good student who was keen on science, particularly biology. Once I fully accepted that my injury had ended my dancing career, I started pursuing marine-science opportunities in Seattle.

How did you find your first science post?

I visited the US National Oceanic and Atmospheric Administration's National Marine Mammal Lab, found the office of the deputy director and introduced myself. I said I was really interested in a science career working with marine mammals, and wanted to find out how to volunteer. I got lucky. They let me volunteer once a week while working on my undergraduate degree. I learned to catalogue and identify individual humpback whales, do spatial analysis and map beluga whales.

How did you approach science research?

Dancing and science have similar requirements. You have to be super-focused, singleminded and able to spend time alone working for more than 12 hours a day. So I approached it in the same way I did professional dancing.

Did you go straight to graduate studies?

No — I applied to the School of Aquatic and Fishery Sciences at the University of Washington, but was not accepted because of my scores on the Graduate Record Examinations, an admissions requirement for most US graduate schools. I took a year off and retook the exams while doing seal research in Alaska. It taught me to keep going and never give up.

Why did you focus on narwhals for your PhD?

I was interested in Arctic ecology. It was intimidating to accept invitations to be the only woman on a team heading to the Canadian High Arctic for a month to tag narwhals, but when I went, the trip proved inspiring and



made me realize that there was much to learn about this difficult-to-study species. This was a turning point that led me to focus my PhD on the ecology of narwhals.

What was the scariest moment?

Nobody teaches you how to run generators, deter polar bears or survive in the Arctic much less run field surveys — so there is a lot to learn. The scariest moment was definitely when a polar bear picked up the scent of the whale we were tagging and charged into the water towards our boat. Luckily he veered away at the last minute.

You took an artist to the Arctic last year. How did that come about?

Greenland is stunningly beautiful, but data don't capture the essence of all that's changing there. I wrote a grant to the non-profit G. Unger Vetlesen Foundation in New York City, which funds scientific, literary and educational projects, and suggested a three-year project titled 'Imaging the Arctic'. I took artist Maria Coryell-Martin to the field last spring to record the environment through paintings, field sketches and multimedia. We've turned her art and my research into an outreach project that we can take to schools or galleries to teach kids about Arctic ecology and environment.

Is marine biology a competitive field?

That's a hard question to answer. Studying really cool animals is a dream job for many people, but you have to be okay with roughing it. That's not for everyone. And you have to fight for money. Doing a project in the Arctic is really expensive, given the logistics of operating safely when the closest village is 100 kilometres away. There's also the unpredictability of the environment. It does require tenacity.

INTERVIEW BY VIRGINIA GEWIN

PHYSICAL SCIENCES UK recruitment drive

The UK Engineering and Physical Sciences Research Council (EPSRC) is launching doctoral studentships in quantum technologies, robotics and energy and sustainability. Recruitment is under way for 4,400 students as part of the £764-million (US\$1.25-billion) scheme. The council announced 3,500 studentships last November and 900 this month, and is spending £390 million to operate 91 new Centres for Doctoral Training across 30 UK universities. Funders include universities and industrial and private partners, where awardees will study and do research. UK research funding has been relatively protected despite austerity policies in recent years, says Lesley Thompson, director of sciences and engineering at the EPSRC.

EU GRANTS Funding in demand

The European Research Council (ERC) named its first Consolidator Grant recipients on 14 January, all mid-career researchers who are 7-12 years past their PhD. The 312 awardees each received up to €2.75 million (US\$3.74 million). The ERC created the new category after the number of mid-stage applicants for its Starting Grant in 2013 jumped to more than 3,600, up by 46% on 2012, reflecting tight funding across Europe. The original Starting Grant is now open to researchers who earned their PhDs 2-7 years ago. The average success rate for both grants is less than 9%. "Competition will remain fierce" for the coveted grants, says ERC president Jean-Pierre Bourguignon.

WORK-LIFE BALANCE Fit for purpose

Adults who exercise regularly are happiest with their work-life balance, finds a study in the press at Human Resource Management. The authors asked 476 US working adults about their exercise behaviour. Those who worked out more than three times a week were most likely to feel positive about managing work and personal duties. Co-author Russell Clayton, who studies management at Saint Leo University in Florida, says that professionals including researchers, whose schedules can preclude long workouts, should aim to fit in brief stints each day. Lab meetings, he suggests, can involve a walk around campus - and scientists should take the stairs. "Find exercise in the margins," he says.