

in his lab. “Just because I’m the inventor of the technology, I should not be precluded from using that technology to pursue scientific discovery,” he says. But, in every paper and every presentation that he publishes, he is careful to include a competing-interests statement to acknowledge that he invented and commercialized the technology.

Industry and industry-sponsored research also poses COI-management problems. Susan Zonia, research-integrity officer at the University of Chicago in Illinois, says that often researchers accept consulting fees from a company and then want to do research that is sponsored by that company. (In the United States, drug and medical-device manufacturers must typically disclose such payments at openpaymentsdata.cms.gov, a publicly searchable database.) If a company proposes to fund research by or collaborate with an academic lab, the parties typically negotiate a collaboration agreement that spells out the nature of the relationship, ownership of intellectual property and who exactly will be conducting the research.

Peter Seeberger, director of the Max Planck Institute (MPI) of Colloids and Interfaces in Potsdam, Germany, has founded half a dozen companies in the United States and Europe. Because the MPI accepts government funds, he says, its students and postdocs are generally precluded from corporate research and development unless a collaboration agreement is drawn up. When Seeberger launched one of his businesses, MPI researchers who wanted to work there had to quit their MPI jobs.

Transparency is key, says Milan Mrksich, a chemist at Northwestern who has founded four companies over the past ten years, including one that runs high-throughput screening assays for pharmaceutical clients. Each year, he meets with his team to disclose his external projects and corporate ties so that students and lab members don’t inadvertently find themselves directing their efforts towards corporate goals. “My policy is that full disclosure is the best protection,” he says.

Handling conflicts of interest can be burdensome. COI managers emphasize that the goal is not to quash innovation, but rather to expose potential conflicts so that they can be managed. “Nothing about the process is meant to be prohibitive,” says Rupinder Grewal, COI officer at the Massachusetts Institute of Technology in Cambridge. Like all institutions, she says, hers wants to enable good science and, through it, the betterment of humanity. “During that process,” she says, “if you make some money, that’s good as well.” ■

Jeffrey M. Perkel is technology editor at Nature.

TURNING POINT

Whale watcher

Asha de Vos is fascinated by pygmy blue whales (Balaenoptera musculus indica), a population of which breed and calve off Sri Lanka’s southern coast, one of the world’s busiest shipping lanes. A TED Fellow and National Geographic Explorer, the marine-mammal researcher works to protect the subspecies and is using her US\$150,000 fellowship from the Pew Charitable Trust, awarded last year, to create and help to fund Oceanswell, a marine-research and outreach organization in her native Sri Lanka.

How did you first encounter pygmy blue whales?

In 2002, after doing a marine-biology degree at the University of St Andrews, UK, I was in New Zealand for field experience when I wangled my way onto a whale-research vessel that was circumnavigating the globe. On the trip, I saw my first group of six pygmy blue whales — the smallest species of blue whale.

Why did the sighting matter to you?

Scat nearby indicated that the creatures had been feeding. Typically, large whales migrate between cold feeding areas and warm breeding areas. But these were feeding, breeding and calving in the tropical waters of Sri Lanka. I decided I wanted to spend my life understanding and protecting these whales. Six years later, I launched the Sri Lankan Blue Whale Project — the first long-term research project on blue whales of the Northern Indian Ocean. It is now part of Oceanswell.

How did you go about that?

I earned a master’s degree in integrative bioscience from the University of Oxford, UK, so that I could learn field-research techniques. Then I returned home, where I worked with the International Union for the Conservation of Nature on wetland and reef projects. But I had to leave because of a lack of funding. So, in 2008, when the Sri Lankan civil war was coming to an end and the whale-watching industry was beginning, I approached a tour operator.

To do what?

I was the scientist on board answering questions about whales. My real motive was to sight blue whales — I hadn’t seen them in six years — and get Global Positioning System locations for them. With the data I had gathered, I went to the University of Western Australia in Perth to do postgraduate work in marine-mammal research, becoming the first Sri Lankan to earn a PhD in the subject.



What is Oceanswell doing?

We are continuing our research on Sri Lankan blue whales: we have unravelled the mysteries of what these creatures feed on and their diving and surfacing behaviours, and have identified some of the threats they face and ways to limit the number of whale deaths. With my Pew funding, we will create a training and education platform for future marine conservationists in Sri Lanka.

You were named National Geographic Explorer last year.

Yes, and this title, which comes with a cash award of \$10,000, is very close to my heart. I decided to be an adventurer–scientist at the age of six, after leafing through pages of that very magazine. I wanted to be one of the people featured in them — discovering, exploring and contributing to humanity.

What are your next steps?

Sri Lankan pygmy blue whales live all year round near shipping lanes that see heavy traffic, and their biggest threat is getting struck and killed by ships. During my postdoc at the University of California, Santa Cruz (UCSC), I gathered field data on these ship strikes and built mathematical models to try to address the problem. I’ve assembled a team of scientists from UCSC and the US National Oceanic and Atmospheric Administration to develop recommendations for reducing collisions between ships and whales.

In my new role as adviser to the minister of sustainable development and wildlife in Sri Lanka, I am using our findings to push for policy changes that will help to protect the blue-whale population in our waters. ■

INTERVIEW BY VIJEE VENKATRAMAN

This interview has been edited for length and clarity.

CORRECTION

The Turning Point 'Whale watcher' (*Nature* **543**, 579; 2017) included several errors: the subspecies name should have been *indica*, not *brevicauda*; the population off Sri Lanka might not be sizeable; and Oceanswell's remit covers all marine research, not just that for whales.