



Finding the Right Balance

One of the things I am most proud of is the research I have produced, often under challenging circumstances. I am also proud of the balance I have achieved in terms of life experiences,” says **Devi Stuart-Fox**, a zoologist at the University of Melbourne in Australia. “I am ambitious, but I have never been completely single-minded about an academic career path. Other things are important to me.”

Freedom to Travel

One of these things is the freedom to travel and to be exposed to different cultures. While she was doing her Ph.D. at the University of Queensland in Australia, studying variation in the color patterns of desert lizards, Devi joined an international scientific expedition surveying a mountain range in Borneo and also spent a month in Papua New Guinea teaching Papuan university students a course on wildlife conservation. “These were just opportunities that cropped up during my Ph.D. research and I took advantage of them,” says Devi. “I really enjoyed going to these places and working there. It is different from being a tourist.”

It is no surprise that when it came to applying for a postdoc position in 2003, Devi started looking for opportunities outside of Australia. At the time she was interested in asking the question: How do animals use color to communicate with one another? One of the animals best known for its colors is, of course, the chameleon! And most of the world’s chameleon species are only found in Africa and Madagascar.

Six Months in a Tent

So Devi decided to go to the University of Witwatersrand in Johannesburg, South Africa. “Most Australian Ph.D. graduates go to the United States or Europe to do a postdoc, but I wanted to go somewhere different,” says Devi. “It may not have seemed the most strategic career move at the time but I was lucky to have an excellent mentor and that the research worked out, which opened up subsequent opportunities.”

She received a UNESCO-L’Oréal Fellowship, which paid for her to study 21 different populations and species of South African dwarf chameleons, monitoring the changes in color patterns that each produced in the wild. “I spent at least six months in a tent and traveled very widely across the country to find chameleons,” says Devi.

Why the Brightest Colors?

Male chameleons are typically a shade of brown or green, but can switch in a flash to bright green, yellow, orange, or pink. Many biologists have long thought that chameleons gained this ability to change their skin color so that they could hide from predators. But Devi instead determined that, although color change is used for camouflage, this ability evolved primarily to allow chameleons to communicate. Male chameleons use the brightest colors to fend off other males or entice females.

“Devi spent a lot of time in the field capturing animals, ultimately assembling a very large data set. She was able to get good sample sizes even on some species of chameleons that are quite rare,” says her postdoc adviser, ecologist Martin Whiting. The hard work paid off. Devi’s findings were published in a range of journals including the widely read *American Naturalist* and *PLOS Biology*, kicking off a flurry of media attention.

From Ocean to Desert

As a result of her research, Devi was able to land her current position as a lecturer in the Department of Zoology at the University of Melbourne and to receive grants to conduct her research. “Devi is an outstanding scientist,” says Whiting. “She has been highly successful and has already made a name for herself. She is well on her way to becoming a leader in the field.”

“I really like the research I am doing and I like interacting with students,” says Devi. With her students she is now looking at how various animals—from Lake Eyre dragon lizards in the Australian desert to the dumpling squid—use different signals to communicate. “I am still doing a lot of field work with my students, but now I am seven months pregnant so it is getting hard to do,” she says with a laugh.

Although work has been challenging at times, Devi knows that a greater challenge will be combining her life as a researcher with being a parent. “So far, research has been my life. I have other passions like cooking and hiking, but I spend most of my time working,” she says. “When I have children, I will have to take time off. I will have no choice but to develop a better life-work balance.”

“I really like the research I am doing and I like interacting with students.”