Natalie Pilakouta

Natalie Pilakouta is a Lecturer in Animal Behaviour and Conservation at the University of Aberdeen, UK. She leads a research group which studies the effects of environmental change on animal behaviour and adaptation, particularly in insects and fish.



Tell us about your background. How did you first become interested in ecology and evolutionary biology?

When I was growing up, I had a keen interest in animals and decided I wanted to pursue a career that would be related to this. I did not want to become a veterinarian, so after considering a few other options, I decided to study Ecology for my undergraduate degree. I really enjoyed that, so I then pursued a Master's and PhD degree in this field. I'm now a Lecturer in Animal Behaviour and Conservation at the University of Aberdeen.

What is your lab working on currently?

Two major themes in our research are (i) how environmental change may alter animal behaviour and (ii) whether such changes in animal behaviour influence the capacity of populations to adapt to environmental change. We mainly use insect and fish study systems to address fundamental

questions in ecology and evolutionary biology, as well as more applied issues relevant to management and conservation. Our research integrates behavioural ecology, evolutionary biology, ecophysiology, and developmental biology. We use a wide range of approaches including experimental evolution, field-based studies, molecular biology techniques, theoretical modeling, and meta-analytic methods.

What does a typical day look like for you?

Nowadays, I unfortunately spend most of my time working on my laptop rather than in the lab or in the field. On a typical day, my time is split between working on manuscripts or grant applications, preparing lectures, marking, and meetings with undergraduate and postgraduate students that I'm currently supervising.

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What do you most enjoy about your work?

One of my favourite quotes about the scientific process is by Stuart Firestein who said: "It is impossible to convey completely the excitement of discovery, of seeing the result of an experiment and knowing that you know something new, something fundamen-

tal, and that for this moment at least, only you, in the entire world, knows it." For me, that excitement of discovering something new is probably the most enjoyable part about doing research. In addition to that, supervising research students and seeing them develop into independent scientists has been one of the greatest pleasures of my academic career.

What do you find most challenging?

The most challenging part of my work is balancing demands between research, teaching, and administration roles. I definitely need to get better at saying "no", but this can be difficult to do when exciting opportunities come up, so it is very easy to overcommit.

What is your lab hoping to work on in the future?

A new line of research I am developing is on the effects of climate change on animal fertility. Male fertility, in particular, is highly sensitive to heat stress, so there is increasing concern about how it will be affected by rising temperatures.

What advice would you give to aspiring scientists in this area?

Try to build a wide-ranging skillset. Think broadly within and across disciplines. Talk to people working on topics that are seemingly unrelated to what you are doing. Do not only go to seminars or conference talks on topics that are in your specific area of research. You never know when one of these talks will make you think about something in a different light or allow you to come up with a really exciting idea that you might not have thought of otherwise.