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## Understanding the neuroendocrine mechanisms of behaviour in birds: From laboratory to field studies

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I am an avian neuroendocrinologist and I have spent my research career understanding how environmental factors coordinate both the timing and the progression of reproduction and the associated behaviour. For most bird species reproduction is seasonal and breeding is regulated by environmental cues including photoperiod, food availability, temperature, and social interactions. During my presentation I will talk about my journey from an undergraduate student at the University of Bristol to Full Professor at the University of Edinburgh. There have been many adventures along the way, especially with the field work in Alaska! I have always had a passion for birds and understanding how hormones are intricately linked to behaviour. There are many advantages to studying wild birds in their natural environments especially in relation to understanding adaptations in our changing world. The laboratory setting also offers certain benefits and the technologies that are presently available to avian endocrinologists could only be dreamt of when I was an undergraduate student. We are now entering an exciting period in avian endocrinology with the annotation of many more avian species' genomes including wild birds such as the white-crowned sparrow. Comparative genomic approaches and species-specific genetic tools can be used, as well as LC-MS and identification of the genes responsible for integrating environmental information.