

**\*PhD on the function and evolution of avian taste with Hannah Rowland at the University of Cambridge.\***

**\*Importance of the area of research concerned\*:**

Many animals depend upon their sense of taste to survive. But our understanding of the molecular basis of taste is mostly based on mammal studies. It is unclear to what extent other vertebrates, such as birds, use similar mechanisms. Genomics and behavioural studies on the avian sense of taste will address basic questions in evolutionary biology. Findings can be applied to create agricultural pest control measures and to formulate diets for the pet trade or for captive breeding programs.

**\*Project summary\*:**

The molecular bases of bird olfaction and vision are well understood. In contrast, little is known about the taste sensitivity of birds, or the genetic basis of taste in any bird species. Because birds are adapted to a diverse range of habitats and dietary niches, they are an ideal study system for questions about the evolutionary ecology of taste. The candidate will investigate the evolutionary dynamics of avian taste receptor genes, differences in feeding behaviour and taste preferences across individuals and species, and the physiological processes underlying taste behaviour plasticity. Contact Hannah at

[hr325@cam.ac.uk](mailto:hr325@cam.ac.uk)

Hannah Rowland <

[hr325@cam.ac.uk](mailto:hr325@cam.ac.uk)

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