



## Postdoc scientist on predator cognition and antipredator defences

A postdoc is available to work with Dr Hannah Rowland (Max Planck Institute for Chemical Ecology) and Dr John Skelhorn (University of Newcastle) to explore various aspects of masquerade.

**Background:** Masquerade is an antipredator defence strategy in which species resemble inedible objects, often inanimate, such as twigs, stones and bird-droppings (Skelhorn, 2015; Skelhorn, Rowland, & Ruxton, 2010; Skelhorn, Rowland, Speed, & Ruxton, 2010). Masqueraders are misclassified by their predators for the object that they resemble (Skelhorn, Rowland, Speed, et al., 2010). The function of masquerade has been tested and confirmed in the lab, but not in the field.

**This post:** we will explore the antipredator benefits of masquerade in the field, and the information ecology that predators do (or don't) use about masquerade. The appointed postdoc will design and conduct a series of field-based predation experiments using artificial prey, and work towards using social network information about predation that can be collected on PIT tagged populations of bird predators.

**Requirements:** We are looking for someone who can lead field-based predation experiments, and manage a team of field assistants. Excellent field skills will be paramount, including experience of creating artificial prey, conducting intensive and long-periods of predation experiments, and managing multiple sites and experimental blocks. Applicants should have the strong communicative skills that fieldwork requires. Experience in studying animal cognition is desirable. The candidate will also be willing to learn how to incorporate social behavioural data into their experimental design and analysis. This project will involve fieldwork in both Germany and the UK, and will be based in Germany.

### Specific skills and experience:

Essential skills and experience	Desirable skills and experience
PhD in Evolutionary ecology, Behavioural ecology, or related field	PhD Antipredator defences/predator-prey interactions
Knowledge of animal behaviour and animal cognition	Knowledge of prey defences and predator-prey interactions.
Experience with long-term field-based behavioural studies with animals (ideally birds)	Knowledge of behavioural approaches to measuring foraging behaviour in birds.
Ability to run field-based animal behaviour experiments independently, with attention to detail being essential	Experience of managing field assistants
Good computing skills: handling complex and large datasets	Experience collecting and analysing social network data
Proficiency in statistics and the use of R	Experience of designing artificial prey
Conscientiousness and attention to detail	
Totally reliable	

Good communication, team-working and interpersonal skills	
Positive, flexible attitude	
Enthusiastic and hard working	
Clear evidence of research productivity	
Right to work in the UK	
Flexibility in working hours	
Experience of working to deadlines	
Full, clean drivers licence	

### Further information

**Start date:** March 2021 or sometime shortly after. Flexibility in start date may be required (and provided) in light of the current pandemic.

**Funding:** Until 31/01/2023

**Location:** Max Planck Institute for Chemical Ecology, Field sites: Jena, Germany, and University of Cambridge Madingley Wood

**Can I work remotely?** Field-based components of the research will take place in Jena and Cambridge. It is anticipated that the appointed postdoc will spend approx. 9-12 months in the field (not necessarily continuously). The candidate will be based in Jena.

**Is there money to cover the postdoc attending conferences?** Yes. Roughly 1 per year of appointment.

**How to apply?** Submit your CV, a cover letter outlining how you fit the selection criteria, and names of 3 people who will write you a letter of recommendation to [predatorsandpreympg@gmail.com](mailto:predatorsandpreympg@gmail.com)

**For further information** contact Hannah Rowland [hrowland@ice.mpg.de](mailto:hrowland@ice.mpg.de)

**Closing date 12.02.2021**

The remuneration is paid according to the collective agreement of the public service TVöD according to the qualification and the activity to be transferred. We particularly welcome applications from women and under-represented minority candidates. The Max-Planck society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. The working language of the group is English.

### References

Skelhorn, J. (2015). Masquerade. *Current Biology*, 25, R643–R644.

Skelhorn, J., Rowland, H. M., & Ruxton, G. D. (2010). The evolution and ecology of masquerade. *Biological Journal of the Linnean Society*, 99(1), 1-8.

Skelhorn, J., Rowland, H. M., Speed, M. P., & Ruxton, G. D. (2010). Masquerade: Camouflage Without Crypsis. *Science*, 327, 51.