

FUTURE LEADER TO WATCH

Future leader to watch – Eunice Tan

First Person is a series of interviews with the first authors of a selection of papers published in Biology Open, helping early-career researchers promote themselves alongside their papers. Eunice Tan is first author on 'Motion: enhancing signals and concealing cues', published in BiO. Eunice is Assistant Professor in the department of Environmental Studies, at Yale-NUS College, Singapore, investigating the ecological interactions between animals, their predators, and the environment.

What is your scientific background and the story of how you got to where you are today?

I started with a Life Sciences degree at the National University of Singapore, where I discovered my passion for animals and their environment. I continued with a master's in Biology, where I examined the function of web decorations in spiders. I received the Endeavour Australian Postgraduate Award to pursue my PhD in 2010 at the University of Melbourne, Australia, where I examined the evolutionary pressures on leaf beetle colour patterns. After my PhD, in 2016, I returned to Singapore to take up a postdoctoral position at Yale-NUS College, to examine the elements of a successful anti-predator colour pattern in butterflies. In 2018, I commenced a tenure-track position here, where I continue my research interests in understanding ecological interactions.

What is the most important take-home message of your Review?

Motion can affect the detection of animals, and importantly, *reduce* signalling efficacy so that the animal is not detected.

What has surprised you the most while researching this Review?

The diverse examples of how organisms use motion to conceal cues. For instance, experiments by Umeton et al. (2019) on mantids presented with artificial prey indicate that as speed increases, prey with contrasting patterns are more difficult to detect.

What do you feel is the most important question that needs to be answered to move the field forward?

How does movement interact with animal colour patterns?

What changes do you think could improve the professional lives of early-career researchers?

Mentoring from senior academics. Awareness and support from administration.

What's next for you?

Using stick and leaf insects as study systems, I am exploring how motion affects detection of animals. However, field work is currently limited because of COVID restrictions at the moment, both locally in Singapore, and international travel to field sites in Southeast Asia.



Eunice Tan



The raised abdomen of a disturbed spiky stick insect, *Haaniella echinata*.

References

- Tan, E. J. and Elgar, M. A. (2021). Motion: enhancing signals and concealing cues. *Biology Open*. **10**, bio058762. doi:10.1242/bio.058762
- Umeton, D., Tarawneh, G., Fezza, E., Read, J. C. A. and Rowe, C. (2019). Pattern and speed interact to hide moving prey. *Curr. Biol*. **29**, 3109-3113.e3. doi:10.1016/j.cub.2019.07.072

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