## **Australasian Ornithological Conference 2022**

By Juliane Gaviraghi Mussoi

Twitter: @JGMussoi

During conferences, sleep is usually the last thing I think about. There are so many talks to watch, people to meet, and places to visit that by the end of it, when all the excitement cools down, I need to sleep for two days straight. But, for AOC 2022, I thought much more about sleep for a couple of reasons.

First, AOC 2022 was entirely online. So instead of waking up early and running to the venue, we could sleep in, get out of bed and turn our computers on. The conference was hosted on a virtual event portal. Our talks were prerecorded (another reason I had a better night of sleep), and after our presentations, we had a quick live Q&A. The conference was well organised, and we had all the tech support needed. We could also network online through the "Speed Networking Session", where I met many new people and had great conversations. But as someone who loves a good chat, I still missed the lengthy debates that an in-person conference allows.

The second reason I thought more about sleep during AOC2022 is that I gave a talk about my PhD project on the importance of sleep to birds' vocal communication. We all know that when we have a bad night of sleep, it gets hard to focus, our speech gets a bit slurred, and we forget words. However, we know little about how the lack of sleep affects birds' communication. During my PhD, I'm testing whether different sleep disturbances (e.g. noise and light pollution at night) change how birds sing, using Australian magpies and common mynas as test subjects. It's still a work in progress, but we have found that birds sing less and at different times after a bad night of sleep (1). However, sleep disturbances can be stressful (for birds and for us), so is this change a result of lack of sleep or stress? I tested this by feeding mynas mealworms with different corticosterone levels (stress hormone).

Birds that has ingested the stress hormone sang more than those that hadn't. Therefore, it is unlikely that the stress caused by sleep disturbances is why birds sing less after a bad night of sleep. Hopefully, my PhD will reveal more about the importance of sleep on birdsong.

I guess the take-home message from AOC 2022 is that online conferences can be truly enjoyable, and before all conferences, both online and in-person, I should have a good night of sleep before giving my presentation (but a little bit of stress might be ok).

 Johnsson, R.D., Connelly, F., Gaviraghi Mussoi, J. et al. Sleep loss impairs cognitive performance and alters song output in Australian magpies. Sci Rep 12, 6645 (2022). <a href="https://doi.org/10.1038/s41598-022-10162-7">https://doi.org/10.1038/s41598-022-10162-7</a>