September 2023

To Prof Louise Barrett

Editor-in-Chief, *Behavioral Ecology*,

We wish to submit our study entitled “Maternal investment and early thermal conditions interact to affect performance and antipredator responses” for consideration as an Original Article in *Behavioral Ecology*.

Little work has explored whether early thermal conditions during development and maternal investment interact to shape offspring morphology and behaviour. This is critical since anthropogenic alterations of the environment can simultaneously affect the development temperature and the amount of resources mothers can invest in eggs. Using a fully-factorial design we explored the effect that the manipulation of both incubation temperature and maternal egg yolk have on the morphology, performance and antipredator behaviour of juveniles of two sympatric Australian skink species. We found that temperature and maternal investment interact in complex ways, and that such interaction is species-specific. We discuss the ecological, evolutionary and conservation consequences of the results found, highlighting the importance of exploring the multifaceted role that environments play across generations.

We believe that these results will be of interest to a broad range of researchers in behavioural ecology. We thank you for considering our manuscript and look forward to your response.

Yours sincerely,

Maider Iglesias-Carrasco on behalf of all the authors.