Pablo Recio Santiago

PhD Student

Australian National University

pablo.reciosantiago@anu.edu.au / 93.pablo.recio@gmail.com

Dear Editor,

Please consider our manuscript entitled “*Prenatal conditions do not affect brain physiology and learning in a lizard*” for publication in ***Animal Cognition***.

Learning – the ability to acquire and consolidate new information – is crucial for animals adapting to new situations. Environmental conditions during early life can significantly affect learning abilities through alterations in brain function and physiology. While temperature and stress hormones are recognised as factors influencing learning, the interaction between these factors remains poorly understood. Additionally, the physiological mechanisms shaping learning abilities in some taxa are not yet well defined. In our study, we investigate the effects of early temperature and stress hormones on brain metabolic function and spatial learning abilities in the Delicate skink. We demonstrate that brain metabolism and spatial learning are robust across early developmental environments in this species.

Our novel findings have significant implications for the field of physiology and cognitive ecology and are likely to inspire new research on how developmental environments influence cognition. This is essential for understanding animal responses to environmental changes. Given the relevance of our findings for cognitive sciences, we believe this makes our work particularly suitable for a journal like *Animal Cognition*, and we hope you share this perspective.

We confirm that this manuscript has not been published elsewhere and is not currently under consideration for publication in any other journal. All authors have approved the manuscript for submission and declare no conflicts of interest.

Thank you for considering our manuscript for publication. We look forward to hearing from you.

Sincerely,

Pablo Recio Santiago

PhD Student

Australian National University