Humans as a model for understanding biological fundamentals

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Although some scientific disciplines aim at gaining a better

understanding of humans, most biologists ultimately try to understand life in general. This raises the question of whether and when humans are acceptable, or even desirable, models of biological fundamentals. Are humans 'too unique' to be informative with respect to biological fundamentals? Or are there areas where we share key components with other species, or for which our very uniqueness serves to allow novel explorations?

In 'Humans as a model for understanding biological fundamentals', the authors provide a diverse set of perspectives on whether and, if so, how we can use humans as a model for the study of fundamental biological principles. The set of authors includes biologists, psychologists, anthropologists, neuroscientists and philosophers. They cover topics that are seen as primarily related to humans (e.g., sport), others that are considered in relation to non-humans (e.g., trade-offs), and yet others that span the divide (e.g., personality, cooperation, sociality, cognition). They have a diversity of perspectives and a variety of answers to the key questions posed.

It is hoped that this Special Feature will spur a discussion that will lead to a more careful delineation of the similarities and the differences between humans and other species, how these impact the study of biological fundamentals, and also help drive the field to think more carefully about humans' place in biology.

Guest Editors Sarah Brosnan and Erik Postma talked to us about how the Special Feature came to be and explained their interest in the question.

"We both are scientists who got our start exclusively studying non-human species and who have come into studying humans more recently, attracted to what they have to offer as a model species. We strongly feel that there are some general biological questions that are best answered by studying humans, either by themselves or in

conjunction with comparative research programs encompassing multiple species, and that our work on humans is relevant for informing our work with other species. We also feel that this is broadly applicable across areas of study."

This Special Feature covers a broad range of perspectives on an important issue, and includes articles on culture, evolutionary ecology and contest theory and dynamics.

More information: Humans as a model for understanding biological fundamentals. royalsocietypublishing.org/cc/ … logical-fundamentals

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