



Guest Editor's Introduction

Endocrinology of neotropical vertebrates



The original idea for the special issue popped-up during a conversation with Deborah Power, Editor-in-Chief of General and Comparative Endocrinology, and since then we have been working towards the organization of an issue devoted to the study of the endocrinology of Neotropical vertebrates.

The Neotropical realm includes all of South America, most of Mesoamerica (except parts of northern Mexico), all the Caribbean islands, and extreme southern Texas and Florida in the United States (Fig. 1). In this restricted sense, the Neotropical region corresponds to the tropics of the New World. Despite its name, the region includes not only tropical, but also temperate and high-altitude weathers. This region has the highest biodiversity of the world, with the most diverse and complex ecosystems, such as the Amazon rainforest, Valdivian temperate rainforest of Chile and Argentina, Magellanic subpolar forest of Patagonia, the Brazilian Cerrado grasslands, Atlantic forest, Pantanal, Pampas and Caatinga. This ecosystem complexity, has led to the evolution of a wide diversity of vertebrate fauna in the Neotropical region and there are many vertebrate families endemic only in this area. However, studies concerning the endocrinology of these species are

restricted to very few species.

In this context, a selection of researchers from different countries from this area were invited to submit not only original research but also reviews devoted to the endocrinology of the Neotropical vertebrate fauna. In all cases the usual rigorous process of peer-reviewed employed by General and Comparative Endocrinology was used with all the submitted manuscripts. A special thanks is made to the reviewers and to the Journal managers and staff. We are also in debt with the following persons that sent us pictures for the cover of this issue: Vania Regina Assis, Gabriel Campolina, Luiz Renato de França, Facundo Luna, Leandro A. Miranda, Manuel Miranda Anaya, Mónica Muñoz de Toro, Michael L. Romero, Wallisen Tadashi Hattori, Marilina Vera Cortez, Ben Vernasco, Paula Vissio and Lucas Zena.

After the review process, 27 articles were accepted for publication in the special issue and are related to chondrichthyans, teleost species, amphibians, reptiles and mammals. The vast majority of the research groups involved in this kind of research are from Brazil (13 manuscripts) and Argentina (12), but there were also groups from Chile (1), Colombia (1), Mexico (1) and Uruguay (1). There were also researchers

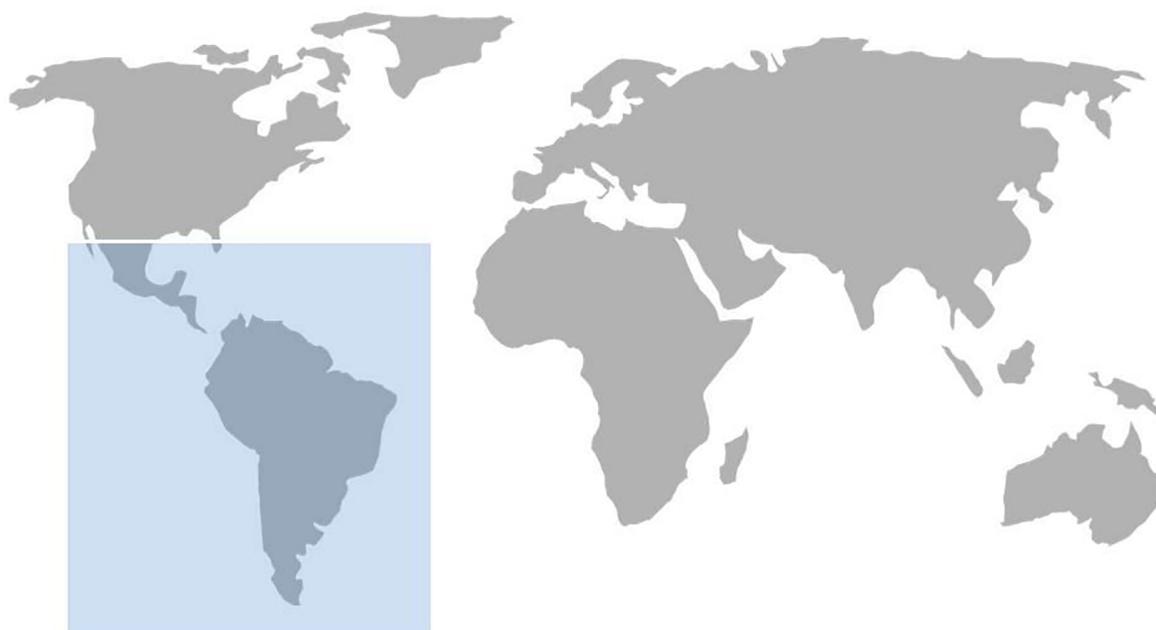


Fig. 1. The Neotropical region is highlighted in the map. It includes all South America, most of Mesoamerica, all the Caribbean islands, and extreme southern Texas and Florida in the United States.

<https://doi.org/10.1016/j.ycgen.2019.01.008>

from Australia, Canada, Japan, Spain, South Africa and USA collaborating with groups from the Neotropical area that were involved in the production of manuscripts for the special issue. Perusal of the authorship on the scientific articles in this special issue highlights the high degree of interaction between different groups of Brazil and Argentina. Such collaborative networks are an important factor driving the research area forward in these countries.

We hope that the exciting studies reported on this small example of Neotropical animals in this special issue stimulates people to study the physiological diversity, unique specializations and endocrinology of the Neotropical fauna.

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