



**14**  
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📍 Salle de formation PRABI

## SÉMINAIRE

# Exploring the mechanisms that generate and maintain biodiversity at different spatial and temporal scales

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Exploring the mechanisms that generate and maintain biodiversity at different spatial and temporal scales

An important challenge in the study of biodiversity is the need to incorporate methods and concepts at different spatial and temporal scales. In particular, the integration of top-down (evolutionary macroecology) and bottom-up (organismal biology) approaches is fundamental to understanding the mechanisms that generate and maintain biodiversity. In this talk we will cover recent advances in the study of geographic ranges and climatic niches, focusing in particular on terrestrial vertebrates, and showing important general patterns that govern their evolution, with important consequences in the context of anthropogenic climate change. We then focus on case studies of miniaturized frogs from Brazilian cloud forests and cave fish from southern China, and explore how their adaptations to particular environmental conditions led to their microendemism.