

IV REUNIÓN BINACIONAL DE ECOLOGÍA

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CONFERENCIA Premio "Patricio Sánchez"

Viernes 13 de agosto
19:30 hs

ECOLOGICAL PHYSIOLOGY IN A CHANGING WORLD

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The narrow approaches to the study of global change on animal biodiversity are limited because they ignore the constellation of physiological mechanisms that organisms use to cope with environmental changes. Indeed, the study of the physiological and biochemical mechanisms that set the limits for environmental tolerance, and which in many ways distinguish species, is an active area of investigation that has gained importance in the current era of climate change. Thus, my talk will identify weaknesses in the few current approaches to the mechanistic bases (from molecular to integrative physiology) of global climatic change biology and to suggest avenues of future research. Therefore, I will address some of the following questions: (i) what are the limits and paths of physiological adjustments to climate change, (ii) how early stages of life cycles are affected by climatic variables, and (iii) what are the energetic costs and trade-offs imposed on animals by climate shifts. These general questions will be tackled, reviewed and analyzed using our studies selected from the Chilean and Mediterranean fauna, not only because they represent diverse metabolic and ecological profiles, but also because of their apparent particular sensitivity.
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