Instituto de Biología Funcional y Genómica

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Filling the diversity-functioning gap: A roadmap towards Synthetic Ecology

Abstract

Microorganisms perform a multitude of important functions across various scales of the biosphere, making their manipulation and eventual control central to modern biotechnology. However, the development of synthetic biology relies fundamentally on the study and control of functions of cultivable species, still far from the capabilities of complex communities. In this talk, I will discuss how the major obstacle to the field's development stems from our lack of understanding of the diversity-function relationship, which is highly degenerate. From there, I will show the need to develop the field from an integrative perspective, encompassing different epistemological approaches (bottom-up vs top-down), computational and experimental methods. This integration would provide solid foundations for the advancement of synthetic ecology, opening new biotechnological avenues.

Viernes 19 Hora: 12:00 pm
Lugar: Salón de actos del IBFG
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