Instituto de Biología Funcional y Genómica Programa de Seminarios Externos "Dionisio Martín Zanca"

## 2024 - 2025

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## **Bioinformatic approaches towards** microbiome and antimicrobial resistance investigations

## Abstract

The rise of high-throughput DNA sequencing (HTS) techniques have allowed us to deeply investigate the microbial communities occurring in many different environments and their "theatre of activity", which all together is considered as the "microbiome". The "theatre of activity" includes, among other features, the genomic information, transcriptomic profiles and occurrence of mobile genetic elements within the microbes from a certain environment, where DNA/RNA sequencing approaches enable the characterization of key features, such as antimicrobial resistance, that is becoming one of the major threats for human, animal and environmental health. The major limitation of these investigations rely on the complex bioinformatic analysis of the great amount of data that the HTS platforms generate. However, many bioinformatic software and approaches are being developed towards bringing closer the computational analysis to the non-bioinformatic-skilled community.

Viernes 11 to Hora: 12:00 pm Lugar: Salón de actos del IBFG Web: https://ibfg.usal-csic.es/semext.php Contacto: Andrés Clemente (andresclemente@usal.es)



