Sociedad Argentina de Microbiología General

XIX CONGRESO DE LA SOCIEDAD ARGENTINA DE MICROBIOLOGÍA GENERAL

22 al 25 de octubre del 2024
Centro cultural y Pabellón Argentina de la Universidad Nacional de Córdoba, Córdoba, ARGENTINA.

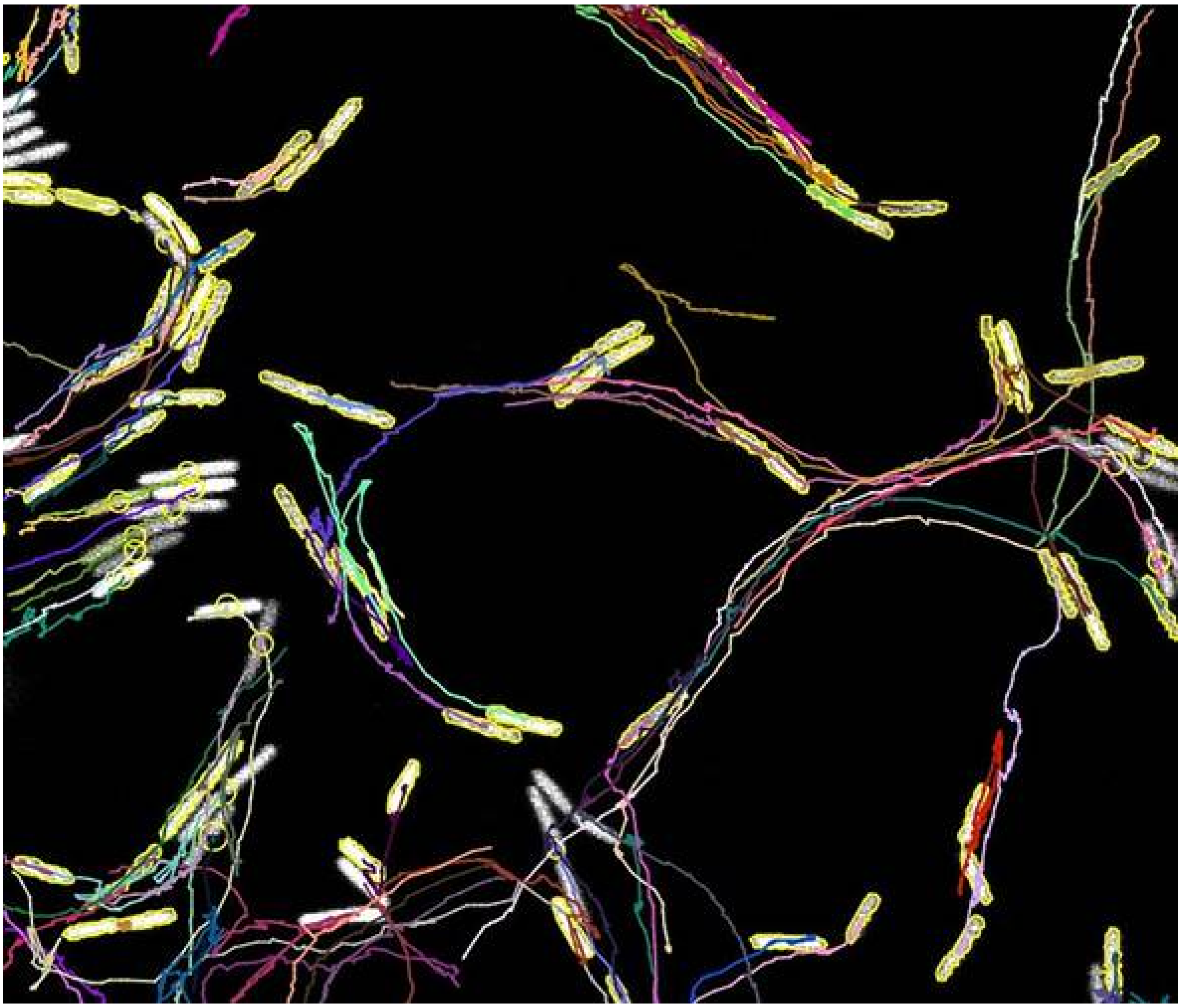

Foto: Se hace camino al andar. Celeste Dea. 1er puesto. Concurso fotográfico SAMIGE 20 años.

229 - invitados

FUNCTIONAL GENOMICS IN PSEUDOMONAS AERUGINOSA

Susanne Häussler

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Contacto: invitado

Whole Genome Sequencing (WGS) of bacterial pathogens will provide detailed insights not only into the bacterial resistance profile, but also shed light on pathogenicity potential and the phylogenetic relatedness of nosocomial pathogens. This, in turn, holds the promise of serving as the foundation for a more precisely targeted treatment approach and the effective implementation of infection control measures. To fulfil this vision, we work on the following objectives: i) establish a pan-genomic database encompassing all conceivable sequence variations within a bacterial species as a prerequisite for robust and automated extraction of sequence information, ii) correlate phenotypes including antibiotic resistance with genotypes, with the ultimate aim of “reading” the bacterial genomes to predict bacterial behaviour, and iii) develop a user-friendly tool for visualizing the outcomes of genotyping. In essence, our undertaking seeks to harness the power of WGS to not only comprehensively document bacterial genetic variations but also to enhance our ability to predict and combat antibiotic resistance, all while advancing our understanding of the intricacies of nosocomial pathogen dynamics.

Palabras clave: palabras_clave