

第8回 HiSEP+HiGEPS 合同

特別セミナー

Look who's talking! Chemical and physical communication in the microbial World

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Bacteria have evolved elaborated communication mechanisms that allow them to act coordinately by sensing the presence of other bacterial fellows. Best characterized microbial communication systems are based on chemical signals called autoinducers that control many important biological functions such as: antibiotic biosynthesis, virulence, plasmid conjugal transfer, swarming, endospores formation or biofilm differentiation, in a process known as Quorum Sensing. Different chemical communication systems have been described that serve for intra-species and inter-species communication. Many bacteria, such as *Pseudomonas aeruginosa* are able to “speak” different chemical languages simultaneously, while others, such as *E. coli*, besides speaking their own chemical language, have evolved specific systems to listen to other bacteria without being noticed. Some eukaryotic microorganisms have also evolved complex communication systems that allow them to function as an organized society, being able to make difficult decisions. Recently, experimental evidence is being accumulated on the microbial emission and response to three physical signals: sound waves, electromagnetic radiation and electric currents. This lecture will review the different languages developed by microbes and how they were discovered, as well as some anti-communication strategies that have been created as defensive weapon by other organisms.

このたび上記英語講演を開催いたします。
学部・学科問わず興味関心のある方のご参加お待ちしております!!

■日時 8月3日(水) 13:15~14:30

■場所 総合研究棟 1階シアター教室

- 主催
- お問合せ
- ホームページ

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