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MitoClub Seminar

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Mitochondria and intracellular bacteria: how close can you get?

Mitochondria are essential eukaryotic organelles evolutionarily related to alphaproteobacteria. We use cell biological approaches to study the interaction between intracellular bacteria and host cell mitochondria from a functional and morphological point of view. We employ different infection models, including both facultative and obligate intracellular bacteria. We could show that the human pathogen *Listeria monocytogenes* induces fission of the mitochondrial network, which has led us (1) to study fundamental aspects of mitochondrial division and (2) to probe for the role of mitochondrial respiration during infection. More recently, we have started a project involving an ill-characterized intracellular alphaproteobacterium called *Midichloria mitochondrii*, which interacts surprisingly closely with mitochondria. These examples illustrate the intricate and multifaceted interaction between mitochondria and intracellular bacteria, an encounter that is particularly intriguing given their evolutionary kinship.

November 20, 2019, 5.00 p.m.

at the Max Planck Institute for Biology of Ageing,
Joseph-Stelzmann-Straße 9 b, Auditorium, ground floor

Host: Lena Pernas,
MPI for Biology of Ageing

After the seminar you are invited to join in for discussions in the foyer.