

Applied Research Center

Integrated Miniaturised Systems



IMMENS

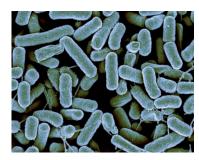
Interplay between microbiome, motility and enteric nervous system in the gastrointestinal tract

The gastrointestinal microflora is gaining more and more attractivity concerning its influence upon a broad range of body functions and well being in general

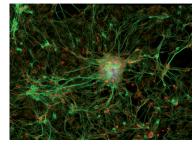
In this project we are investigating the interaction between individual bacteria and complex microflora with the enteric nervous system (ENS), and thus the gut function, especially in neurodegenerative disorders.

Motility measurements under the influence of specific bacteria, as well as co-culture systems where enteric neurons and glials cells are cultured together with bacteria, are used.

A specific focus will be laid on the responses of the ENS to microbiotal stimuli that may change the individual properties of both neurons and glial cells.



Individual bacteria produce and Secrete metabolites or wall components that interact with the ENS



Enteric neuronal and glial cultures stimulated with bacterial lipopoysacharide

Project duration:

10/2014 - 09/2017

Project management:

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