



Thesis

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Doctoral Candidate

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Modelling microbial transfers: a new socioecological approach to farmer–microbe interactions in dairy farming systems

Transitioning to agroecological practices is one way to make livestock farming systems stronger and the environment more resilient. These practices influence a whole range of holobionts and interconnected environmental microbiota, from the soil to the end products. For this thesis, the interactions between farmers and microbes and their influence on microbial ecosystems will be characterized at the scale of dairy farming systems producing raw-milk cheese, particularly with regard to changes in production uses and practices implemented as part of agroecological transitions.

The doctoral candidate will be part of a multidisciplinary, multi-stakeholder consortium set up for the TANDEM project (funded by the HOLOFLUX metaprogramme) that links the biotechnical and social sciences with key socioeconomic partners in the field.

The doctoral candidate will apply approaches from the human and social sciences to integrate data from the biotechnical sciences (microbiology, zootechnics, agronomy, etc.) acquired by the programme's partner teams.

Based on this pluridisciplinary analysis, an original map will be produced of the components of the farming systems studied and a conceptual model will be created of farmers' practices regarding microbes throughout the system and their impact on the fate of microbial ecosystems from soil to cheese (modulation of transfers and/or metabolic potential).