

Title	PDO-cheese: Preserving traditional heritage using vanguard methodologies
--------------	--

Keywords	Traditional foods; microbial ecology; OMIC technologies
-----------------	---

Summary	<p>Cheese is a complex fermented dairy product, harboring diverse microbial communities that change over time and vary depending on the type of cheese and production specifications. This autochthonous microbiota plays a crucial role in determining flavor, quality and safety of the final product. Advances in OMIC methods are renovating our understanding of cheese microbiology, enabling a clearer picture of this multifaceted ecology. However, we need to go beyond! Focus on the functionality of cheese microbiota and its contributions to flavor, texture, quality and safety. Thus, a detailed description of PDO cheese must involve metagenOMICs (assessment of the microbial community present), lipidOMICs (evaluation of lipid decomposition), proteOMICs (estimation of proteolysis), volatilOMICs (appraisal of volatile production) and culturOMICs (isolation, characterization and preservation of putative starters), as proposed in this investigation.</p>
----------------	--

Supervision	
Supervisor	Teresa Semedo-Lemsaddek (CIISA, FMV-UL). tlemsaddek@fmv.ulisboa.pt
Co-Supervisor	Teresa Barreto-Crespo (IBET)