

# Innovative Bio-interventions and Risk Modelling Approaches for Ensuring Microbial Safety and Quality of Mediterranean Artisanal Fermented Foods

## ArtiSaneFood

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**Summary:** The Object of this project is to develop efficient bio-intervention strategies, enhanced process criteria, and an easy-to-use food safety decision support IT tool for participating artisanal food producers, aiming to the reduction and control of food-borne pathogens in 15 artisanal fermented foods of meat or dairy origin produced in Portugal, Spain, Italy, France, Greece, Morocco, Tunisia and Algeria.

The project will be developed through an integrated risk-based approach sustained by the concepts of:

- (i) extensive tracking surveys in the artisanal food chains, in order to identify origin, routes of contamination, risk factors favouring pathogens' survival, and technological causes for lack of homogeneity in the quality/safety of end-products;
- (ii) bio-preservation, whereby functional starter cultures and natural extracts will be assessed as extra hurdles to ensure safety and extend shelf-life;
- (iii) fate studies of pathogens, predictive dynamic modelling,
- and (iv) risk process modelling, for the delineation of the most effective biointerventions, optimisation of process variables and norms/standards, and design of quality monitoring tools.

### International Consortium

Participant No	PI name	Organisation	Country
1 (Coordinator)	Ursula Gonzales-Barron ArtiSaneFood	Polytechnic Institute of Bragança	Portugal
2 Partner 2	Bettache Guessas	University of Oran	Algeria
3 Partner 3	Antonio Valero	University of Cordoba	Spain
4 Partner 4	Lihan Huang	USDA Agricultural Research Service	United States of America
5 Partner 5	Fanny Tenenhaus-Aziza	Centre National Interprofessionnel de l'Economie Laitière	France
6 Partner 6	Jean-Christophe Augustin	French Agency for Food, Environmental and Occupational Health and Safety	France
7 Partner 7	Spyridon Kintzios	Agricultural University of Athens	Greece
8 Partner 8	Gerardo Manfreda	University of Bologna	Italy
9 Partner 9	Achemchem Fouad	University Ibn Zohr	Morocco
10 Partner 10	Nourhene Boudhrioua Mihoubi	Institut Supérieur de Biotechnologie Sidi Thabet, Manouba Université	Tunisia

### Tunisian Consortium

**ISBAM & IRA, Mednine/ Gabes Univ.**  
05 researchers (2 seniors, 2 PhD, 01 Engineer)

**INAT & IRESA/ Carthage Univ**  
05 researchers (4 seniors, 1 PhD)

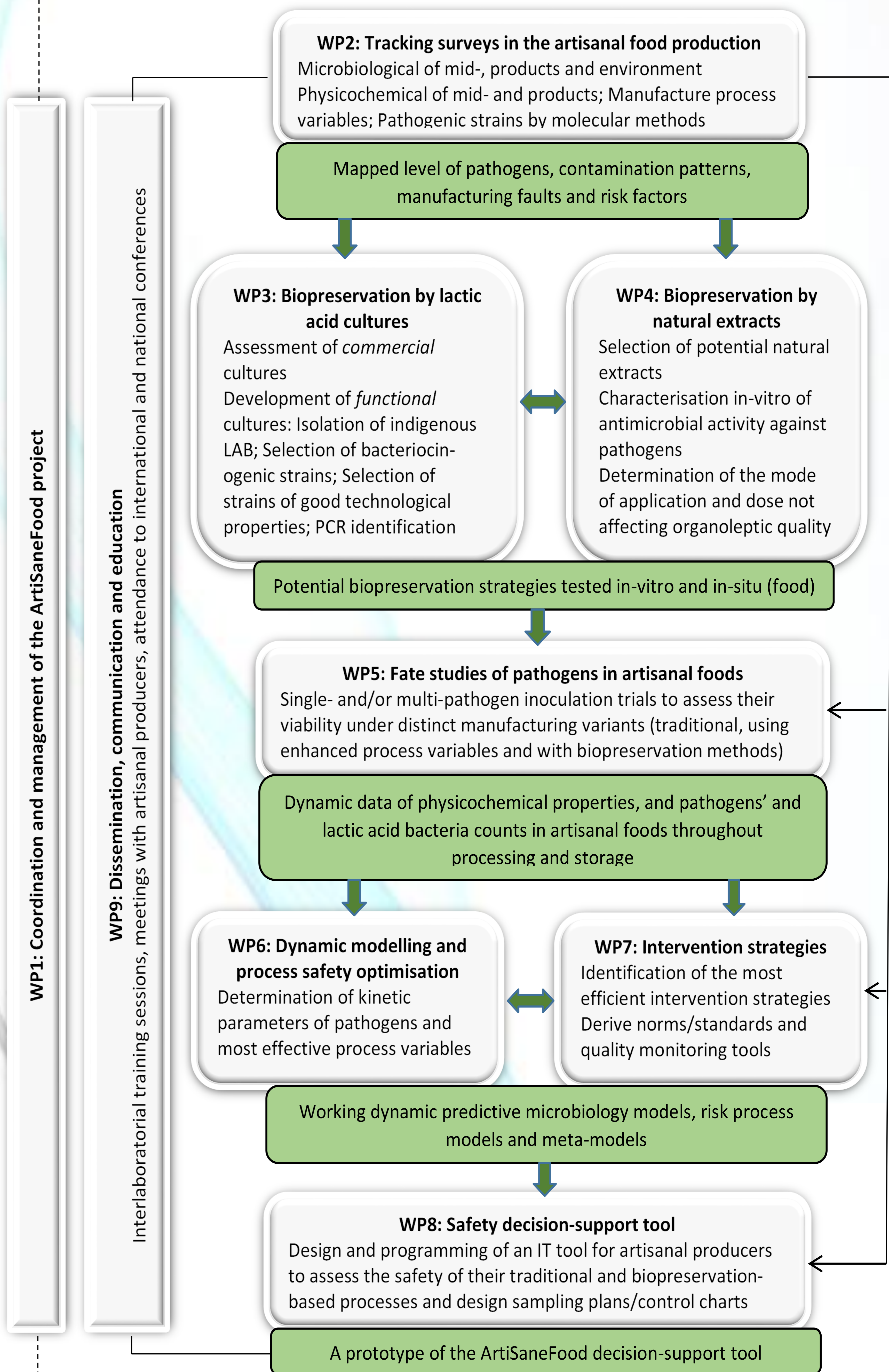
**ISBST/ UMA**  
02 LR  
08 researchers (05 seniors, 3 PhD)

**01 industrial VACPA**  
(RD manager, date extracts)

**ISSBAT / Elmanar Univ.**  
01 senior

**CAMU-Public**  
(02 seniors)

Contribution of Tunisian Partners: Participant to WP2-WP8 & Lead of WP9 (Dissemination and communication)



Schematic of the nine work packages of the ArtiSaneFood project with brief descriptions of tasks (grey boxes) and main objectives (green boxes).

Notice sequence and interrelationships between WPs



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