

PhD programme in FOOD ENGINEERING AND BIOTECHNOLOGY

Possible research projects and supervisors	
(List of available projects, other topics dealing with the activity of the research groups can be matter of study)	
Title	Supervisor/s
1. Extraction and isolation of natural antioxidants for food applications	Prof. Matteo Scampicchio
2. Interdisciplinary research on chemical and sensory markers for precision enology	Prof. Emanuele Boselli
3. Investigation of the role of novel pollutants as a vector of microbial genetic resistances under the One-Health vision	Dr. Lorenzo Brusetti
4. Innovative technologies for the formulation of bioactive ingredients from food by-products	Prof. Giovanna Ferrentino
5. Population genetic and ecological study of invasive agricultural insect pest species and their impact into the agricultural production and the environment	Prof. Hannes Schuler
6. Application of microbial and protein hydrolysates-based biostimulants in vegetable crops to elucidate their mode of action and to improve plants resistance to multiple abiotic stresses.	Prof. Youry Pii/Prof. Stefano Cesco
7. Valorization of food wastes and food processing residues by means of innovative thermochemical conversion processes in a circular and polygenerative perspective	Prof. Francesco Patuzzi
8. Nutritional aspects of the sourdough fermentation for making baked goods	Prof. Marco Gobbetti
9. Diet, probiotics and prebiotics to improve the composition and functionality of the human gut microbiome: invitro and in vivo challenges	Prof. Raffaella Di Cagno/Prof. Marco Gobbetti
10. Cheese fermentation to improve the sensory and nutritional attributes and to decrease the time of ripening	Prof. Raffaella Di Cagno/Prof. Marco Gobbetti
11. Metabolism of phenolic compounds and fatty acids during plant based food fermentation	Prof. Raffaella Di Cagno
12. Forefront solutions for integrated food waste biorefinery (DM 118)	Prof. Francesco Patuzzi