




ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA

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## **FOOD SAFETY AND TRACEABILITY**

*Multidisciplinary research and innovation strategy for Food Safety Assessment and Hazard Risk Management based on sustainable solutions, early predictive models and traceability biomarkers.*



University of Bologna offers a multidisciplinary approach to improve food safety, based on a broad range of knowledge and state-of-the-art equipment.

Research at University of Bologna covers a wide range of issues:

- Update omics technologies to detect, identify and characterize food-borne pathogens and chemicals in foods and feed
- Intervention strategies to reduce the antibiotic resistance in farming and food production
- Prevention and control of food-borne zoonoses through a “one health” approach
- Innovative and sustainable bio-technologies, packaging and logistics to improve food safety along the whole food chain
- Selection of starters, biocontrol agents and probiotics to improve food safety
- Strategies to prevent/limit mycotoxin contaminations in the agro-food systems
- Strategies to prevent/limit pests and diseases based on probiotics and prebiotics to reduce pesticide and drug use
- Set up of methods for post-production removal of contaminants
- Predictive microbiology, risk analysis and set up of tools for hazard identification and assessment along the food chain up to consumer level
- Development of analytical and sensorial methods and foodomics applications for food traceability and authenticity

### HIGHLIGHTS

H2020 projects: [CIRCLES](#) - *Controlling mlcRobiomes CircuLations for bEtter food Systems*; [TROPICSAFE](#) - Diseases management of crops grown in tropical and subtropical areas; [COMPARE](#) - Information sharing platforms for the rapid identification, containment and mitigation of emerging infectious diseases and foodborne outbreaks; [AUTHENT-NET](#) - Transnational information on food authenticity to combat food frauds.

International Networks: **DISH** - *Joint Centre for Excellence in Food Safety*; [MoniQA Association](#) - Monitoring and Quality Assurance in the Total Food Supply Chain; [METRO-FOOD](#) - Research Infrastructure for promoting Metrology in Food and Nutrition.

Infrastructures: Genomics, proteomics, metagenomics, foodomics laboratories; Bio-analytical laboratories; collection of safe and wild microorganisms for starters, biocontrol agents and probiotic selection; Microbiology Laboratories for isolation and characterization of food-borne pathogens.