ISTANBUL UNIVERSITY, FOOD HYGIENE and TECHNOLOGY DEPARTMENT

OUR UNIVERSITY

Founded in 1453, Istanbul University is among the first and longest-standing institutions in Turkey. Located in 5 Campuses and 7 Research Centers in and around the city, Istanbul University is a public academic institution comprising:

- 20 Faculties
- 7 Vocational Schools
- 17 Graduate Institutes
- 1 Conservatory
- 2 Colleges
- 60 Research Centers

Besides, the university is home to a total of 90.000 Undergraduate, 15.000 Graduate, 3.500 International Students, 5.500 Academic and 6.500 Administrative Staff.

Furthermore, Istanbul University holds two of the most renowned Medical Faculties in the country, namely Istanbul Tıp and Cerrahpasa Tıp, with **5,000 medical students** and approximately **1,000 medical academic staff**. These two faculties operate **2 grand hospitals** and **Cardiology, Oncology and Dentistry Institutes** comprising a total **bed capacity of 3,500-4,000** and **2.5 million outpatients and 100,000 inpatients per annum**.

According to the Academic Ranking of Worldwide Universities in 2011, Istanbul University ranked among the first 400 universities making it **the sole Turkish University in the first 500**. Istanbul University has ongoing protocols with over 50 institutions worldwide spanning from USA to Europe and Asia along with over 500 Erasmus agreements. In 2006, the **Nobel Prize for Literature** was awarded to Orhan Pamuk, an Istanbul University graduate of journalism, marking an unrivalled success in the history not only of Turkish universities but also of the country.

OUR DEPARTMENT

Food Hygiene and Technology Department has been founded under the Faculty of Veterinary Medicine in 1972. Located on a closed area of approximately 1000m^2, our department comprises the following laboratories and undertakes related researches include, but not limited to:

- **Food Microbiology Laboratory:** Food-borne pathogens detection and classification, microbial decontamination, technologic applications of food microflora, lactic acid bacteria and starter cultures, Food-borne fungi, Anti-microbial effect of different substances in food production
- **Food Chemistry Laboratory:** Detection of chemical composition of various foods, especially traditional ones, detection of contaminants and veterinary pharmaceutical residues in food, Serology, detection of toxic amines
- **2 Genetic Laboratories:** Food authenticity, GMO, Meat species ID, resistance genes, bacterial ID, genetic traceability, food parasitology and virology
- **Instrumental Laboratory:** Food processing techniques and implications, surface disinfectants, aseptic packaging, modified atmosphere packaging, sensory evaluation and texture analyzes, HACCP and GMP systems, personal hygiene
- **Technology Laboratory:** Manufacturing technologies of food from animal origin, modernization of traditional foods, improvement on quality and safety, evaluation of production techniques using starter cultures, technology of ready-to-eat foods
- **Small scale Abattoir** for research and education
- **Research Laboratories** allocated to research studies and graduate students
- **Student Practice Laboratory** with a capacity of 60 students

HORIZON 2020 EXPRESSION OF INTEREST

A. Contact Details:

Country	TURKEY
Name of the Organisation	ISTANBUL UNIVERSITESI (IU - PIC: 998391222)
Name of the Department	Food Hygiene and Technology
Name of the Contact Person	Prof. Gurhan CIFTCIOGLU
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B. Topic(s) of Interest:

Topics under WP of "Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy" (SFS, BG, ISIB), especially:
- Sustainable food production systems
- Safe food and healthy diets and sustainable consumption
- Global drivers of food security, and
- Food Safety, Food Security, Food Authenticity, Food Traceability, Food Waste and Antibacterial Resistance topics including WATER and AQUACULTURE under other WP's of "Health, Demographic Chance and Wellbeing" (PHC, HCO)
"Climate action, environment, resource efficiency and raw materials" (WASTE, WATER, SC5)

C. Specific Skills Related to the Project:

Skills and competences would be provided by the group include but not limited to: microbiological and compositional analyzis of variety of food, molecular and epidemiological studies, biotechnologic studies, authenticity and traceability studies, studies for traditional foods and technological improvement studies, disease control and tackling withf pathogens for food safety, security and quality, studies for Genetically Modified Organisms, studies for sustainable food production, in relation with the topic(s) of the WP's "Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy", "Health, Demographic Chance and Wellbeing", "Climate action, environment, resource efficiency and raw materials"

D. Proposed Activities for the Project:

IU team would contribute the management and the work packages related food quality, food technology, food chemistry, food microbiology, food parasitology, food virology, food safety, food quality, food traceability, food authenticity and antibacterial resistance.

E. Publications:

Muratoglu, K., Ozdemir, O, Eker, F.Y., Bayrakal, M, Levent, G., Ugur, S., Ozbek, U., **Ciftcioglu, G.** (2014): Correlation between phenotypic and genotypic tetracycline resistance of *Escherichia coli* isolates from food of animal origin. European Biotechnology Congress, 15-18 May, Lecce, Italy.

Aydin A., Cannon J., Zhao T., Doyle M. (2013): Efficacy of a levulinic acid plus sodium dodecyl sulfate (Sds)-based sanitizer on Inactivation of influenza A virus on eggshells, Food and Environmental Virology, 4, 215-219.
Aydin A., Sudağıdan M., Muratoğlu K. (2011): Prevalence Of Staphylococcal Enterotoxins, Toxin Genes And Genetic-Relatedness of foodborne *Staphylococcus aureus* strains isolated in Marmara Region of Turkey, International Journal of Food Microbiology, 2, 99-106.

Fiore, G., **Ciftcioglu, G.**, Azzini, I., Pagano, A. (2010): Integration of EID and DNA markers for the traceability of animals and animal products. Scientific and Technical Report, European Commission, Joint Research Centre, Institute for the Protection and the Security of Citizens, Ispra, Italy.

Kucukbasmaci, O., **Ciftcioglu, G.**, Midilli, K., Issa, G. (2008): Detection of extended spectrum *B-Lactamase* producing Enterobacteriaceae from food animals in Turkey. Revue Vet. Med., 159 (12), 586-592.

Ciftcioglu, G., Arun, O.O., Vural, A., **Aydin, A.**, Aksu, H. (2008): Survival of *Escherichia coli* O157:H7 in minced meat and hamburger patties. Journal of Food Agriculture and Environment, 6(1), 24-27.

Aydin, A., Erkan M.E., Baskaya R., **Ciftcioglu G.** (2007): Determination of *Aflatoxin B-1* levels in powdered red pepper, Food Control, 9,1015-1018.

F. EU Framework Projects (Ciftcioglu, G):

Project acronym /starting date	Main objectives	Main activities	Role in the Project
MonCoTraf, 2007 EC, JRC, IPSC	Food Traceability "From Farm to Fork"	Traceability of the food chain by using EID and DNA Techniques	Project Supervisor

OTHER:

Seconded National Expert
Ciftcioglu G. (2007-2009):
European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, Ispra (VA), Italy.

FP7 Expert Evaluator
Ciftcioglu, G. (2010):
EC/FP7-KBBE-2010-4, Activity 2.2 "Fork to Farm: Food (including seafood) Health and Well-being", for the evaluation of 11 project proposals.

SOCRATES ERASMUS Mobility Actions (Teaching)
1 - Ciftcioglu, G. (May, 2007):
Munich Ludwig Maximilians University, Faculty of Veterinary Medicine, Food Hygiene and Technology Department, Munich, Germany.
2 - Aydin, A. (2013):
University of Thessaloniki, Faculty of Veterinary Medicine, Greece.