

Francesco Aliberti

Professor

Department of Biology

tel. +39 081 2534627

fax +39 081 2534623

e-mail francesco.aliberti@unina.it

www.docenti.unina.it/francesco.aliberti



RESEARCH INTERESTS

Title: Human impact: risk evaluation and risk management

Hygiene monitoring of environmental and food matrices is focused on the identification of traditional contamination indicators and of new microorganisms and/or emerging pathogens (*Legionella spp.*, *Plesiomonas shigelloides*, *Escherichia coli* O157H7, *Clostridium difficile*, ecc.); experimenting of bioremediation techniques, mostly aiming to the reduction and suppression of microbial and ecotoxicological parameters.

The research lines are diversified basing on matrix type:

- Marine water: characterization of parameters indicated by regulations aimed to protect the bathing/touristic use of coastal zones; marine pollution.
- Thermal waters: characterization and protection of the water intakes of thermo-mineral waters through microbiological evaluations before waters utilization; analysis of the maturation process of thermal mud, for which there are not valid techniques able to establish the proper maturation levels;
- Drinking water: detection of chemical, physical and biological parameters, basing on the characteristics of the different plants and analysis of purification treatments employed; monitoring of mineral waters carried via tankers on boats in order to identify hygienistic critical points of the distribution "chain" and characterization strategies aimed to risk prevention;
- Wastewaters: characterization of chemical, physical, biological and ecotoxicological parameters; monitoring of wastewater treatment plants for the evaluation of the proper functioning. Experimenting of selected biomass employed for biological treatments, with respects to biofilm formation;
- Solid wastes: characterization of solid waste and treatments for landfill leachate using adapted biomasses and ecotoxicologic evaluations;
- Food: hygienistic monitoring of food manufacturing chains and application of HACCP method; research and identification of emerging pathogens.



CAREER

year	Title
2016	In charge of the works under contract of Hygiene, (waters, food, environmental) Laboratories – University of Naples "Federico II" – Department of Biology
2016	Manager of O.R. 2 research line for PON Project "Aquasystem"
2006	Coordinator of Specialized Center of Monitoring for Soils and Waters - PON Project "PETIT Osa"



TEACHING AND MANAGEMENT

2016 – Teaching activities:

- Hygiene and Laboratory; Scuola Politecnica e delle scienze di base – Bachelor Degree Course in Biological Sciences - University of Naples "Federico II"
- Hygiene and Risk Management; Scuola Politecnica e delle scienze di base – Master Degree Course in Biological Sciences - University of Naples "Federico II"
- Epidemiological Methodologies; Scuola Politecnica e delle scienze di base – Master Degree Course in Biological Sciences - University of Naples "Federico II"
- Hygiene of Food Productions– Continuing Education Course in Hygiene and Food Technologies – University of Naples "Federico II"
- Hygiene and Health Education – Continuing Education Course in Food education and prevention of dysmetabolic pathologies – University of Naples "Federico II"
- Hygiene of Food Chains - – Continuing Education Course in Food Hygiene, Nutrition and Wellness – University of Naples "Federico II"

2016 – Coordinator: In charge of University Orientation – Scuola Politecnica e delle Scienze di Base – Collegio di Scienze

2013-2015 – Coordinator: Member of the Council of Scuola Politecnica e delle Scienze di Base

- Carraturo, F., Gargiulo, G., Giorgio, A., Aliberti, F., Guida, M.
Prevalence, Distribution, and Diversity of *Salmonella* spp. in Meat Samples Collected from Italian Slaughterhouses
(2016) *Journal of Food Science*, . Article in Press.
- Pagano, G., Aliberti, F., Guida, M., Oral, R., Siciliano, A., Trifuoggi, M., Tommasi, F.
Rare earth elements in human and animal health: State of art and research priorities
(2015) *Environmental Research*, 142, pp. 215-220.
- Arienzo, M., Albanese, S., Lima, A., Cannatelli, C., Aliberti, F., Cicotti, F., Qi, S., De Vivo, B.
Assessment of the concentrations of polycyclic aromatic hydrocarbons and organochlorine pesticides in soils from the Sarno River basin, Italy, and ecotoxicological survey by *Daphnia magna*
(2015) *Environmental Monitoring and Assessment*, 187 (2), 14 p.
- Carotenuto, M., Lofrano, G., Siciliano, A., Aliberti, F., Guida, M.
TiO₂ photocatalytic degradation of caffeine and ecotoxicological assessment of oxidation by-products
(2014) *Global Nest Journal*, 16 (3 SPEC. ISSUE), pp. 463-473.
- Arienzo, M., Toscano, F., Di Fraia, M., Caputi, L., Sordino, P., Guida, M., Aliberti, F., Ferrara, L.
An assessment of contamination of the Fusaro Lagoon (Campania Province, southern Italy) by trace metals
(2014) *Environmental Monitoring and Assessment*, 186 (9), pp. 5731-5747.
- Pasquale, V., Romano, V., Rupnik, M., Capuano, F., Bove, D., Aliberti, F., Krovacek, K., Dumontet, S.
Occurrence of toxigenic *Clostridium difficile* in edible bivalve molluscs
(2012) *Food Microbiology*, 31 (2), pp. 309-312.
- Pasquale, V., Romano, V.J., Rupnik, M., Dumontet, S., Čižnár, I., Aliberti, F., Mauri, F., Saggiomo, V., Krovacek, K.
Isolation and characterization of *Clostridium difficile* from shellfish and marine environments
(2011) *Folia Microbiologica*, 56 (5), pp. 431-437.
- Conte, M., Aliberti, F., Fucci, L., Piscopo, M.
Antimicrobial activity of various cationic molecules on foodborne pathogens
(2007) *World Journal of Microbiology and Biotechnology*, 23 (12), pp. 1679-1683.
- Gargiulo, E., Aliberti, F., Novellino, M.R., Salerno, A.
Antibiotic resistant germs from thermal mineral waters from several areas with thermal waters in the Campania Region [Germi antibiotico-resistenti nelle acque termominerali di alcune zone termali della Regione Campania]
(2003) *Igiene Moderna*, 118 (3), pp. 173-195.
- Gargiulo, E., Esposito, A., Aliberti, F.
Analysis of microfauna as an indicator of biological depuration of waste waters with surfactants [L'analisi della microfauna come indicatrice della depurazione biologica di liquami contenenti tensioattivi]
(2003) *Igiene Moderna*, 118 (1), pp. 1-18.