



Food Science - V.P. POSITION

DESCRIPTION OF THE PHD PROGRAM

The PhD in Food Science at the University of Parma is a multidisciplinary graduate course with a faculty composed of nationally and internationally recognised professors and researchers active in many different fields, all linked together by food as a common denominator. The research fields covered are Food Chemistry, Food Technology, Human Nutrition, Food Safety, Food Microbiology and Food Economics. Within the specific framework of the visiting professor project, built around the themes of Toxicology/Bioactivity of specific food components, the PhD Faculty could already count on a number of excellent researchers, recognized as leaders in their respective fields worldwide, members of institutional and trans-national research panels and working groups, and listed among the ISI-Thomson highly cited researchers. The expected research activity in the field will ideally yield results in the evaluation of the bioactivity and toxicity of secondary metabolites of various origin present in food and food ingredients, including the development of new methodologies and new *in vitro* and *in vivo* models.

DESCRIPTION OF THE SCIENTIFIC FIELD & VISITING PROFESSOR PROFILE

The demand for a Profile with competences in food toxicology aims to fill a void at the University of Parma, by establishing a person that would be able to cover a primary role in risk characterisation and assessment, food supplements development and health and nutritional claims assessment. The required profile would have a preferential focus on the study of bioactivity and of secondary metabolites in food, in relation to human and animal metabolism and the functional interaction between toxic/bioactive compounds, their metabolic derivatives and other food components. Furthermore, the required profile would bring competences in the field of new toxicology evaluation and epigenetic characterisation of toxic effects methodologies.

DESCRIPTION OF THE DIDACTIC ACTIVITIES OF THE VISITING PROFESSOR

The didactic activities shall have seminar-like characteristics and would focus on the multidisciplinary aspects, in particular:

- Risk characterisation and assessment in food
- Metabolism (including intestinal) effects, on toxic activities and bioactivity of natural toxins and phytochemicals present in the diet.
- Human and animal metabolism study methodologies (omics technologies and cellular imaging)
- Risk characterisation innovative methodologies (combined toxicology)

The didactic activities, carried out in English language, shall be further developed based on the person's ability to attract experts, including ones from international institutions, research entities and companies able to pass on to the students the frontier research and technology transfer requirements in the field.

Presence at the University of Parma: At least 3 weeks per year