

Curriculum

Personal information

First name/ Surname

Francesca Marcon

Nationality

Italian

Date of birth

03/10/1966

Gender

Female

Work experience

Dates 1989 -2001

Occupation or position

PhD student: Post-Doc and ISS-fellowship holder in the Unit of Genotoxicity and Mutagenesis. Laboratory of

Comparative Toxicology and Ecotoxicology, Istituto Superiore di Sanità, Rome, Italy

Dates 2001-present

Occupation or position

Researcher, Unit of Mechanisms, Biomarkers, Models, Dept. Environment and Health, Istituto Superiore di Sanità,

Rome, Italy held

Dates 2011-2014

Member of scientific advisory entities

Member of the OECD working group for the revision of the guidelines on genotoxicity testing

Topics: the WG revised genotoxicity test guidelines and the OECD introductory document on genetic toxicology testing and testing strategies

2014-2018

Member of the working group Toxicology and WG Flavourings of the EFSA Panel on Food Contact Material, Enzymes, Flavourings and Processing Aids (CEF)

2018 to 2022

Current EFSA involvements: Member of the Additives and Products or Substances used in Animal Feed (FEEDAP) Panel, Member of the WG Toxicity and WG Feed Flavourings of the FEEDAP Panel; Member of the Crosscutting WG Genotoxicity of the Scientific Commette (SC)

Topic: genotoxicity and mutagenesis; specific contribution: analysis of dossiers (focusing on technical annexes on genotoxicity testing), in view of the most up-to-date scientific information on the mechanisms of mutagenesis, to prepare scientific opinions (four publications in the EFSA J in May 2017); the scientific advice produced by this WG are preliminary to the authorization of the use of the substances in the European Union.

Education

awarded

Title of qualification Degree in Biological Sciences, University of Rome "La Sapienza", Italy, 1990 Specialization in Applied Genetics, University of Rome "La Sapienza", Italy, 1995

competences

Personal skills and Dr. Francesca Marcon is presently researcher in the Unit of Mechanisms, Biomarkers and Models (Dept. Environment and Health, Istituto Superiore di Sanità). She was trained as genetic toxicologist and has extensive experience in biomonitoring studies on human population as well as in genotoxicity studies both in vivo and in vitro. She is involved in studies on genetic and environmental factors modulating individual susceptibility to genotoxic agents. She has more than 30 research publications in the field of mutagenesis and carcinogenesis in peer-reviewed journals.

Most representative publications

Zijno A., F. Marcon, P. Leopardi, R. Crebelli (1996) Analysis of chromosome segregation in cytokinesis-blocked human lymphocytes: non-disjunction is the prevalent damage resulting from low dose exposure to spindle poisons. Mutagenesis 11 (4): 335-340.

Verdina A., R. Zito, G. Cortese, P. Leopardi, F. Marcon, A. Zijno and R. Crebelli (1996) Induction of humoral immunity toward 2-acetylaminofluorene in mice: modulation of DNA binding after 4-weeks dietary exposure to the carcinogen. Carcinogenesis 17: 1705-1709.

Marcon F., Zijno A., Crebelli R., Carere A., Parks R., Schuler M. and Eastmond D.(1999) Chromosome damage and aneuploidy detected by interphase multicolor FISH of benzene-exposed Estonian workers. Mutat. Res. 445: 155-166.

Marcon F., Boei J., Natarajan A.T. (2000) Influence of interactions between homologous chromosomes on the formation of radiation induced chromosomal aberrations. Int J Radiat Biol 76:1343-1348

Marcon F., Zijno A., Dobrowolny G., Crebelli R. (2001) Detection of 1cen-1q12 lesions in different phases of cell cycle: multicolor FISH analysis of peripheral lymphocytes from subjects with occupational exposure to petroleum fuels. Mutagenesis 17:157-162

Marcon F., Andreoli C., Rossi S., Crebelli R. (2003) Assessment of individual sensitivity to ionizing radiation and DNA repair efficiency in a healthy population. Mut Res GTEM 541: 1-8

Zijno A., Andreoli C., Leopardi P., Marcon F., Rossi S., Caiola S., Verdina A., Galati R., Cafolla A., and Crebelli R. (2003) Folate status, metabolic genotype, and biomarkers of genotoxicity in healthy subjects. Carcinogenesis 24: 1097- 1103.

Marcon F., Boei J.J.W.A., Natarajan A.T. (2004) Human-hamster hybrid cells used as models to investigate species-specific factors modulating the efficiency of repair of UV-induced DNA damage. Cytogen. Genome Res. 104: 72-76

Leopardi P., Marcon F., Caiola S., Cafolla A., Siniscalchi E., Zijno A., and Crebelli R. (2006) Effects of folic acid deficiency and MTHFR C677T polymorphism on spontaneous and radiation-induced micronuclei in human lymphocytes. Mutagenesis 21: 327-333.

Zijno A, Verdina A, Galati R, Leopardi P, Marcon F et al (2006) Influence of DNA repair polymorphisms on biomarkers of genotoxic damage in peripheral lymphocytes of healthy subjects. Mutat Res FMMM 600:184-192

Marcon F, Palli D, Zufferli A, Mazzoli E, Siniscalchi E, Sera F, Saieva C, and Crebelli R (2009) Evaluation of radiation-induced chromosome instability in subjects with family history of gastric cancer. Biomarkers 14(4):226-234

F.Marcon, F.Silvestrini, E.Siniscalchi, D.Palli, C.Saieva, and R.Crebelli (2011) Response to ionising radiation and family history of gastric cancer: analysis of gene expression in blood cells of first-degree relatives of gastric cancer patients. Familial Cancer, 10: 107–118.

E.Lupari, I.Ventura, F.Marcon et al (2012) DNA polymerase kappa protects human cells from the cytotoxic effects of O⁶-methylguanine in a pathway that involves the rad51 protein, DNA repair 11:579-586

Marcon F, Carotti D, Andreoli C, Siniscalchi E, Leopardi P, Caiola S, Biffoni M, Zijno A, Medda E, Nisticò L, Rossi S, Crebelli R. (2013) DNA damage response in monozygotic twins discordant for smoking habits. Mutagenesis 28: 135-144

Ottini L, Rizzolo P, Siniscalchi E, Zijno A, Silvestri V, Crebelli R, Marcon F (2015) Gene promoter methylation and DNA repair capacity in monozygotic twins with discordant smoking habits. Mutat. Res. 779:57-64

Marcon F, Siniscalchi E, Andreoli C, Allione A, Fiorito G, Medda E, Guarrera S, Matullo G, and Crebelli R. (2017) Telomerase activity, telomere length and hTERT DNA methylation in peripheral blood mononuclear cells from monozygotic twins with discordant smoking habits. Environ Mol Mutagen doi: 10.1002/em.22127

Crebelli R, Caiola S, Conti L, Cordelli E, De Luca G, Dellatte E, Eleuteri P, Iacovella N, Leopardi P, Marcon F, Sanchez M, Sestili P, Siniscalchi E, Villani P. (2019) Can sustained exposure to PFAS trigger a genotoxic response? A comprehensive genotoxicity assessment in mice after subacute oral administration of PFOA and PFBA. Regul Toxicol Pharmacol. 106:169-177