

Dr. Christelle Adam-Guillermin



Christelle Adam-Guillermin obtained her PhD in ecotoxicology at the university of Aix-Marseille in 1997. Her studies included experimental and field studies on the environmental impact of a nuclear power plant, and ecological modelling. She joined the environment and health division at the French Authority for Nuclear Safety and Radiological Protection (ASNR), to conduct studies on the transfer and effects of radionuclides in ecosystems. In 2012, she became head of the radionuclide ecotoxicology laboratory (LECO/ASNR) until 2019, when she moved to the dosimetry division to lead radiobiology research programs at the MIRCOM microbeam.

Christelle Adam-Guillermin's research focuses on the biological effects of low ionizing radiation (IR) doses and charged particles of different LET, especially on DNA (nuclear and mitochondrial) and epigenetic factors, and on characterization of biomarkers of radiation effects applicable to reprotoxicity and neurodegeneration.

C. Adam-Guillermin has been involved in several collaborative international research projects: she participated in the ERICA project focused on the implementation of a method to assess the environmental risk associated with radionuclides (FP6, 2004-2007), was task leader on biomarkers of radiation effects in Chernobyl fauna (INTAS, 2002-2005), coordinator of a French-Japanese project on low dose effects in birds from Fukushima (ANR-JST, 2011-2013), task leader in the STAR radioecology network of excellence (FP7, 2011-2015), work package leader on epigenetic changes and transgenerational effects in COMET project (FP7, 2013-2017), task leader in the CORAFE project on space aquaculture (CNES, 2022-) and coordinator of the BOOST project on developments on small or medium size accelerator facilities (PianoForte, 2025-2026). She has led the ALLIANCE's working group on IR transgenerational effects and radiosensitivity from 2015 to 2019. She also organized international scientific workshops on IR effects in Chernobyl (Chernihiv, 2016), on epigenetics and transgenerational effects (Paris, 2018) and on AOPs (virtual workshop, 2021). She has been involved in several informative events for the general public. C. Adam-Guillermin is the author or co-author of more than 120 articles in peer-reviewed scientific journals and more than 10 chapters in 5 books.

She has been involved in several expert groups on the development of radioprotection for non-human biota at the international level (IAEA/MODARIA group, OECD/NEA RAD/CHEM AOP working group of High-Level Group on Low-Dose Research, Article 31 Group of Experts of the European Commission). She is a member of UNSCEAR's group on CNS radiobiology.

C. Adam-Guillermin's involvement at the International Commission of Radiological Protection began in 2019 as a member and then co-chair of C1 Task Group 99 that aimed to compile methods and guidance for the best use and practices of the concept of Reference Animals and Plants in support of the application of the system of radiological protection. She is also involved in TG121 on effects on offsprings and next generations and in Task Group 118, on Relative Biological Effectiveness (RBE), Quality Factor (Q), and Weighting Factor (wR).