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CURRENT POSITION (since January 2012)

- **Head of Department on research and expertise on environmental risks (IRSN/PRP-ENV/SERIS)**, a 50-member permanent staff composed of experts, researchers and technicians, plus ca. 15 PhD and post-docs. This Department implements R&D programmes on the fate and the effects of radionuclides present or released into the environment. The ultimate goals are to increase the understanding on ecological consequences of radioactive contamination, to improve human and environmental health risk assessment methods and tools, and finally to provide a high-quality environmental expertise in the field of radioprotection.

EDUCATION

- Accreditation to Supervise Doctoral Research, University of Provence, Marseille, 1999
- PhD, Ecotoxicology/Radioecology (with distinction, highly commended), Montpellier University, 1990
- Engineering degree, Institute of Water Sciences and Technologies, Montpellier (Polytech') 1987

PROFESSIONAL EXPERIENCE IN BRIEF

- 2007-2011: **Head of Department** devoted to R&D and expertise on fate and effects of radionuclides in ecosystems (IRSN/DEI/SECRE)
- 2000-2007: **Head of Laboratory** of Radioecology and Ecotoxicology (LRE)
- 1994-2000: Responsible of freshwater radioecology research. Introduction of the multipollution context and transposition of ecotoxicological approaches and methods to radioecology
- 1990-1994: In charge of the conception and coordination of environmental data management within radioecological monitoring of the French nuclear power plants

RESEARCH ACTIVITIES

- **Field of interest: major obtained advances, main associated publication (5-year Impact Factor JCR 2011)**
- **Ecological risk assessment for chemicals and radioactive substances. Derivation of ecological screening benchmarks.** Garnier-Laplace, J., Della-Vedova C., Andersson P., Copplestone D., Cailles C., Beresford N., Howard B.J., Howe P., Whitehouse P. 2010. [A multi-criteria weight of evidence approach to derive ecological benchmarks for radioactive substances](#). Journal of Radiological Protection, 30, pp 215-233. (1.292)
 - **Ecological consequences from nuclear accidents (Chernobyl, Fukushima).** Garnier-Laplace, J., Beaugelin-Seiller K., Hinton T. (2011) [Fukushima Wildlife Dose Reconstruction Signals Ecological Consequences](#). Environmental Science & Technology 45(12): 5077-5078 (5.764); Garnier-Laplace, J., Geras'kin, S., Della-Vedova, C., Beaugelin-Seiller, K., Hinton, T.G., Real, A., Oudalova, A. (2012) [Are radiosensitivity data derived from natural field conditions consistent with data from controlled exposures? A case study of Chernobyl wildlife chronically exposed to low dose rates](#). Journal of Environmental Radioactivity, Article in Press (1.528)
 - **Ecology, population dynamics: propagation of effects from individual to populations.** Lance E., Alonzo F., Garcia-Sanchez L., Beaugelin-Seiller K., Garnier-Laplace, J. (2012). [Modelling chronic effects of ionizing radiation at the population level in non-human species](#). Science of the Total Environment 429: 206-21. (3.536)
 - **Biogeochemistry: theoretical speciation and relationship between speciation and bioavailability.** Denison FH, Garnier-Laplace J. 2005. The effects of database parameter uncertainty on uranium(VI) equilibrium calculations. Geochimica et Cosmochimica Acta, 69(9):2183-2191. (4.589)
 - **Ecotoxicology applied to radionuclides: dose-response relationships, from molecular to individual levels of biological complexity.** Lerebours, A., Bourdineaud, J.-P., Van Der Ven, K., Vandenbrouck, T., Gonzalez, P.,

Camilleri, V., Floriani, M., [Garnier-Laplace, J.](#), Adam-Guillermin, C. (2010). Sublethal effects of waterborne uranium exposures on the zebrafish brain: Transcriptional responses and alterations of the olfactory bulb ultrastructure. *Environmental Science and Technology*, 44 (4), pp. 1438-1443. (5.764)

► **Research training: 10 PhDs, 4 post doctoral supervision.**

► **International invited conferences at BARC (Mumbai, Inde), NIRS (Tokyo, Japan), USGS (Grand Canyon, USA)...**

PROFESSIONAL SERVICE, EXPERTISE, REPRESENTATION

- Member of the ICRP committee 5 for the term 2013-2017
- Member of the national expert committee (radioprotection et environnement - GGRADE) in support of the French Nuclear Safety Authority (ASN)
- Participation to or/and Coordination of working groups in Euratom Radioprotection projects (*End of Project*)-FASSET (2004), ERICA (2007), PROTECT (2009), FUTURAE (2009), STAR (2015); at the international level (INTAS, INSC projects), and at the national level (projects funded by the national research agency).
- Research Grants from various industries (EdF, ANDRA, AREVA) in the field of Radioprotection.
- Contribution to international business contracts (Tunisia, China)
- Environmental expertise at the national level (e.g., member of a multi-stakeholders group dedicated to Environmental Impact Assessment of French former uranium mining sites - "GEP-mines", assessment of releases licensing of nuclear industry), at the international level (e.g., UNSCEAR (Effects of ionizing radiation on non-human biota , Levels and effects of radiation exposure due to the Fukushima nuclear accident), IAEA (EMRAS I & II Biota Effects), OSPAR)
- Member of scientific committee for conferences (e.g., ECORAD, SETAC, ICRER), for research team evaluation, for research programmes.
- Member of scientific societies (e.g., UIR, SETAC Society of Environmental Toxicology, SFRP, SIL Society of International Limnology)
- Graduate student committee member for accreditation of research, for PhD juries (ca. 20)

FIVE MOST CITED PUBLICATIONS (among 80+; h index = 15)

- [Garnier-Laplace, J.](#), Della-Vedova, C., Gilbin, R., Copplestone, D., Hingston, J., Ciffroy, P.. [First derivation of predicted-no-effect values for freshwater and terrestrial ecosystems exposed to radioactive substances](#) (2006) *Environmental Science and Technology*, 40 (20), pp. 6498-6505. Cited 39 times.
- [Garnier-Laplace, J.](#), Copplestone, D., Gilbin, R., Alonzo, F., Ciffroy, P., Gilek, M., Agüero, A., Björk, M., Oughton, D.H., Jaworska, A., Larsson, C.M., Hingston, J.L. [Issues and practices in the use of effects data from FREDERICA in the ERICA Integrated Approach](#) (2008) *Journal of Environmental Radioactivity*, 99 (9), pp. 1474-1483. Cited 31 times.
- Morlon, H., Fortin, C., Floriani, M., Adam, C., [Garnier-Laplace, J.](#), Boudou, A. [Toxicity of selenite in the unicellular green alga Chlamydomonas reinhardtii: Comparison between effects at the population and sub-cellular level](#) (2005) *Aquatic Toxicology*, 73 (1), pp. 65-78. Cited 30 times.
- Andersson, P., [Garnier-Laplace, J.](#), Beresford, N.A., Copplestone, D., Howard, B.J., Howe, P., Oughton, D., Whitehouse, P. [Protection of the environment from ionising radiation in a regulatory context \(protect\): proposed numerical benchmark values](#) (2009) *Journal of Environmental Radioactivity*, 100 (12), pp. 1100-1108. Cited 26 times.
- Fortin, C., Dutel, L., [Garnier-Laplace, J.](#) [Uranium complexation and uptake by a green alga in relation to chemical speciation: The importance of the free uranyl ion](#) (2004) *Environmental Toxicology and Chemistry*, 23 (4), pp. 974-981. Cited 24 times.