

Short Curriculum Vitae: Dr F.Madec

May 2017



Date of birth: December 3rd 1948

Place of Birth: Brittany, France

Past positions :

- Vice-director of Anses Ploufragan laboratory, one of the Veterinary Research Laboratories of Anses, the French Agency for food, Environmental and Occupational Health Safety, a governmental organisation (around 1200 people). F. Madec was in charge of the pig sector at Anses
- Ploufragan laboratory (210 people, 70 scientists) deals with Pigs, Poultry and Fish. Animal health, animal welfare and safety of food of animal origin, are the key items of the research laboratory.
- In addition of his broader responsibility, F Madec was leading in Ploufragan a specific Research Unit devoted to epidemiology and welfare in pigs
- Retirement from Anses in 2012. Then, he founded his own company devoted to consultancy activities about pig sciences (mainly health and population medicine in pigs)

Education

Agr eng(anim sciences), Master science, PhD doctorate, Prof hab (HDR). Degree in human epidemiology (Pasteur Institute, Paris); Degree in veterinary epidemiology (Alfort Vet School). Diverse certificates in “staff management”, in “statistics”, in “animal nutrition”.

Activities

- **Research activities in veterinary epidemiology.** The main subjects that were considered in his research projects referred to the field of health and welfare in pigs and safety of pig meat. As regard health, obviously the major epidemic diseases that affected the pig in the 1970s, were matter of interest for him, at the start of his career (*ie*: Classical Swine Fever, Pseudorabies, Transmissible Gastro-Enteritis...). But soon, his main efforts were directed to the relationships between the environment the pigs were offered on the farms and the occurrence and the expression of diseases and/or poor welfare. Those diseases which were focused on, also called production diseases have, or not, an infectious origin. They are also called “multifactorial diseases” since they result from cascades of interactions where the environment (feeding, housing, management...) is strongly involved whereas specific pathogens often interfere in the fallacious process as actors leading to the symptoms and lesions and thereby to economic losses. Therefore most of his research projects fell within the scope of analytic epidemiology (also known as “ecopathology” in France) and the search of risk factors was a key point. A dedicated methodology could be designed for the purpose including for the preparation of the surveys and for the statistical issue of how to deal with such data sets. In addition to field studies, since in the lab, there were level-3 biosafety facilities, numerous experiments were also carried out on either Specific Pathogen Free or conventional animals including their inoculation with pathogens. The latter were studied in close cooperation with the virologists and bacteriologists of the laboratory making all-together a coherent working team. When he left position, he was the author or co-author of more than 200 scientific publications in refereed journals. The various issues of pig health have been considered along his career (*eg*: respiratory diseases, reproductive problems, digestive disorders...). In the late 1990s, he especially investigated an emerging and devastating disease named PMWS (Post-weaning Multisystemic Wasting Syndrome, circovirus) that suddenly broke in Western Europe. Laboratory, experimental and field

investigations were intensively and jointly carried out in his institute and they rapidly resulted in a prevention programme (the Dr Madec's 20 points) that could benefit to the pig industry throughout the countries, since there was no commercial vaccine yet available at that time. .

- **The other activities** were related to scientific support to both governmental, European and professional institutions. They also concerned education (Vet schools and Universities.) and supervision of PhD students.

F. Madec was an active member of national scientific societies in France, *eg*: the board of the University "Agro-campus" in Rennes, the board of INRA "Pig Sciences Commission", the French Society for Animal Science (AFZ), the French Society for Veterinary Epidemiology (AEEMA).

F. Madec was involved in international activities: *eg*: several working groups of the EFSA (European Food Safety Authority) on different subjects such as animal welfare, salmonella infection, pig housing, farm equipment & herd management...; Other examples: FAO (World Organisation for Food and Agriculture) and OIE (the world organisation for animal health). He also participated to working groups under the auspices of the EU in Brussels.

He joined the ISAH (International Society for Animal Hygiene) for the first time in Skara, Sweden (1988 Congress) where he could meet the leaders of this organisation (*eg*: Prof I Ekesbo, Prof D Strauch, Prof P Rafai...). He became there secretary at the board, a position he kept for many years. He was nominated honorary member of the ISAH in 2011,

After having been secretary, he became President of "Management and health commission of EAAP (the European Association for Animal Production). From this organisation he received the "Leroy Fellowship Award" in 2005. In 2010 he received the "distinguished service award" for his input in animal sciences in Europe.

He was also involved in diverse master courses abroad about pig sciences and has got experience of international pig production systems throughout the world.