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Press release

The Maisons-Alfort Laboratory for Animal Health: 115 years dedicated to "One Health"

Created in 1901, the Maisons-Alfort Laboratory for Animal Health, one of the world's oldest laboratories specialising in the study of infectious animal diseases, celebrates its 115th anniversary this year. This event, incorporated into the celebrations to mark the 250th anniversary of the Alfort National Veterinary School (ENVA), is an opportunity to take stock of its many years of scientific production and expertise, during which it has successfully adapted to exponential technological advances in biology research, and which have made it a reference throughout the world. It is also the moment to pay tribute to its founders, who made a lasting contribution to veterinary infectious diseases, in particular Edmond Nocard and Emile Roux. And lastly, this anniversary is the chance to reflect on the place it occupies and will continue to occupy in the surveillance and control of emerging and re-emerging infectious animal diseases, in relation to human health, in light of the climatic, ecological and socio-economic upheavals that our planet is experiencing.

The Maisons-Alfort Laboratory for Animal Health is required to deal with problems that place the common good in animal health at risk. Its mission is to identify pathogens affecting herds (mainly cattle, sheep, goats, pigs and Equidae) and causing epizootics (animal epidemics) or zoonoses (animal diseases whose pathogens can be transmitted to humans).

It offers new alternatives in vaccination. In this regard, the Laboratory's teams study pathogens of all kinds responsible for infectious diseases such as foot-and-mouth, bluetongue, bovine tuberculosis, trichinellosis, *etc.*, but they also develop research on different disease vectors (ticks, for example). The laboratory works according to the concept of "One World, One Health", and provides scientific and technical support and data to risk managers, particularly in the framework of emerging diseases.

Its integration at the heart of the ENVA campus means that it can share the school's infrastructure, staff and research projects, and benefit from the contribution of the National Institute for Agricultural Research (INRA) through two joint research units (UMRs).

The laboratory is responsible for major reference work in the analytical diagnosis of many animal diseases, at national, European or global level. In this respect it has 23 reference mandates: 15 at national and eight at international level.

What is the outlook for the years to come?

In order to maintain its level of excellence, the Laboratory is working on three major challenges: to continue the modernisation of its infrastructure, to deal with emergences and re-emergences in its area of activity, and to fully integrate, in the diagnostic-surveillance-control chain, the new technologies currently revolutionising the approach to health.

Global climate change, as well as new forms of globalisation in trade, have led to the emergence in Europe over the last few years of exotic diseases with a high economic impact. The emergence of these animal infectious diseases remains a topical issue and has repeatedly mobilised the Laboratory's teams (new variants of the bluetongue virus, tick-borne diseases, schistosomes, etc.).

"Old diseases" are still a concern for our country and warrant the sustained efforts of the Laboratory. Another challenge will be to develop methods of screening, analytical diagnosis and control, according to the European and international standards in force, while integrating new technologies for analysing genomes and proteins.

The detailed analysis of host/pathogen interactions, as well as the development of new methods in epidemiology, will enable the Laboratory to continue to combat emerging and re-emerging animal diseases, dedicated to the concept of "One Health" promoted by the World Health Organisation.