Dogs trained for Covid-19 detection in Nouvelle-Aquitaine, France

During January 2021 EnvA (National Veterinary school of Maisons-Alfort), UHC (Bordeaux University Hospital Centre) and Ceva Santé Animale initiated, along with several regional players, a training programme, CYNOCOV, to retrain service dogs to detect Covid-19. The "One Health" programme combines transdisciplinary expertise, human and veterinary health with animal expertise, to train dogs to recognise the smell of a Covid-19 positive individual (even from the early stage of infection) by sniffing their perspiration.

Presentation of the Covid 19 detection dog training program in the presence of Alain Rousset, President of the Nouvelle-Aquitaine Region, Philippe Buisson, Mayor of Libourne, Stéphanie Fazi-leblanc, Deputy Director General of Bordeaux University Hospital Centre, Marc Prikazsky, CEO of Ceva Santé Animale, Lieutenant-Colonel Bruno Carré of SDIS 33 and Colonel Lionel Nicot of the Nouvelle Aquitaine Region Gendarmerie (Friday, January 29, 2021).

Through the "Nosaïs-Covid-19" project, Professor Dominique Grandjean of the National Veterinary School of Maisons-Alfort (EnvA) developed a scientifically validated method for training detection dogs to identify Covid positive patients through sampling perspiration collected with swabs from their armpits (a non-invasive and non-contaminating sampling method).

With the methodological support of EnvA, the Infectious Diseases Department of the Bordeaux University Hospital Centre (UHC) and Ceva developed a scientific protocol designed to identify patients with mild or few symptoms of Covid-19. Once taken, UHC sends samples to the CYNOCOV programme training centre, based at Ceva's Headquarters in Libourne, France.

The Nouvelle-Aquitaine Region Gendarmerie and the SDIS 33 (Gironde Fire Department) provided four dog handlers with five detection dogs for the 2 month training programme. Each dog learns to distinguish by smell, (olfactory difference), the difference between samples from people with early stage Covid-19 and samples from uninfected individuals. Their progress is duly catalogued and recorded throughout the progression phase.

"The average observed for the sensitivity and specificity of the dogs is around 95% across all the studies conducted to date", explains Pr Dominique Grandjean.

[HD pictures available here](#)

At the end of this training, the aptitude of the detection dogs will be validated and tested at the training center by the UHC team across a representative number of all samples. Depending on the results, a mobile unit could be deployed in several cities of the New-Aquitaine region as a pre-selection method of screening, according to prior validations by competent authorities.

The Cynocov study is the perfect illustration of the "One Health" commitment between public and private actors of human and veterinary health, in the search for solutions contributing to the control of the Covid-19 epidemic.

About

The **Nosaïs project**, led by Pr. Grandjean of the National Veterinary School of Maisons-Alfort, develops and evaluates methodologies for training dogs in the early detection of chronic or infectious human pathologies. Since March 2020, the Nosaïs project has scientifically validated the principle of using detection dogs in the search for covid-positive patients on the basis of sweat samples. *www.vet-alfort.fr*

The Bordeaux University Hospital Centre (UHC), with 14,200 professionals, including 1,500 doctors, is the largest employer in Nouvelle-Aquitaine. Recognized for the excellence of its care, it welcomes one million patients each year. Its Infectious and Tropical Diseases Department is particularly mobilized in the fight against the Covid-19 epidemic, in particular with the Cynocov research project of which it is the main partner. www.chu-bordeaux.fr

Ceva Santé Animale, the French leader in animal health, is committed to the "one health" approach. "What concerns animal and vegetal health will impact human health. It is the concept of one health on our planet that drives our society on a daily basis", explains Dr Marc Prikazsky, Ceva CEO. www.ceva.com/fr

The Gironde Departmental Fire and Rescue Service (SDIS 33), with more than 5,400 agents, ensures the protection of people, property and the environment on a daily basis. In 2020, the SDIS 33 carried out more than 124,000 operations to rescue people, fight fires and protect against natural and technological disasters and catastrophes.

The Gendarmerie region of Nouvelle-Aquitaine and the SDIS of Gironde each provide two dog-team pairs for the Cynocov study, which trains dogs to detect samples from Covid-positive patients and evaluates its potential practical applications.

This project illustrates the willingness of the Nouvelle-Aquitaine Region to be part of the "One Health" global health concept with the players in human and animal health, particularly in the detection of infectious diseases. www.nouvelle-aquitaine.fr

CONTACTS
Anne Laure Guillaume & Caroline Petit-Brisson, Passerelles agency ceva@passerelles.com - +33 6 72 23 01 21 / +33 6 23 63 48 05
Martin Mitchell, Ceva Santé Animale Communications Director - martin.mitchell@ceva.com - +33 6 5 57 55 40 80