

LRFSN FACILITY FOR EXPERIMENTAL STUDIES IN WILD CARNIVORES

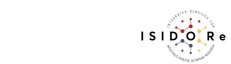


The facility for experimental studies of the LRFSN (Nancy Laboratory for Rabies and Wildlife-SE) provides unique opportunities to explore *in vivo* host/pathogen interactions in endemic wild species (carnivores) susceptible to transmit major zoonotic pathogens under « One Health ».

The LRFSN animal facility is dedicated to host experimental studies with wild canids (foxes, raccoon dogs), mustelids (badgers, ferrets), procyonidae (raccoons) and wild rodents. The facilities benefit from specialised animal facilities, and laboratories at biosafety levels 2 and 3 for samples collection/surgical procedures.

Experienced handlers and veterinarians hold the suitable authorizations for trapping and housing animals from the wild. They provide the best welfare conditions to the wild animals, both at capture or under captivity.

The facility for experimental studies in wild carnivores attracts a large number of innovative and leading edge projects in infectiology and toxicology through national and international partnerships.



A device dedicated to infectious disease and wildlife toxicology



***In vivo* host-pathogen interactions focusing on pathogenicity and cross-species transmission:**

- 🔗 Infectious challenges (virus, bacteria, parasites) on wild and captive carnivores (foxes, raccoon dogs, badgers, ferrets)
- 🔗 Immune responses
- 🔗 Protective responses of vaccine candidates

Specialised expertise for handling wild carnivores:

- 🔗 Trapping in the wild of European species (badgers, rodents, etc...)
- 🔗 Local and general anesthesia
- 🔗 Experimental infection and sample collection in wild and captive animals



Facilities suitable for large cohorts of wild carnivores, either in groups or isolation, at biosafety levels 1, 2 and 3:

- 🔗 206 m² in covered areas suitable for non-aerosolised pathogens
- 🔗 285 m² of BSL 1
- 🔗 88 m² of BSL 3

A large collection of unique samples:

- 🔗 From captive animals (different species / age / sex / infectious agents)
- 🔗 Taken from the wild of these same species for real epidemiological monitoring



Combined with analytical capacities (on site and LRFSN laboratory):

- 🔗 Behaviour (through telemetry)
- 🔗 Peripheral immune responses (cellular and serological)
- 🔗 Molecular diagnostic