## **EDI-IVI, BSL3 ANIMAL FACILITY**

(CH)

## **Research topics:**

The Immunology and Virology Departments of EDI-IVI are internationally recognized for studies on basic porcine immunology, antimicrobial immune responses, viral pathogenesis as well as vaccine development. Our general aim is to understand the functioning of the immune system in pigs and other veterinary species. Our laboratory is focusing on phagocytes, in particular dendritic cells and macrophages. We are developing new vaccine adjuvants and vectors designed to induce specific types of immune responses in pigs to improve antibody and T cell responses, both systemically and at mucosal surfaces. In addition, our research aims to understand the mechanisms of how viruses induce disease and evade the host immune response with a focus on phagocyte-pathogen interaction.

## Activities and services currently offered by the infrastructure/installation:

EDI-IVI is the research unit of the Swiss Food Safety and Veterinary Office and is dedicated to animal health, especially the diagnosis, surveillance and control of highly infectious epizootic diseases. In collaboration with the Vetsuisse Faculty of the University of Bern, the IVI is also responsible for research and teaching in the fields of virology and immunology with a focus on livestock viral diseases. The IVI possesses full equipped BSL3 laboratory and BSL3 animal facilities for experiments with large animals such as pigs and cattle. A large collection of viruses causing epizootic and zoonotic infections are available.

## provided under VetBioNet TNA call:

**Description of the access to be** BSL3 animal facilities for experiments with large animals such as pigs and cattle. These include 4 separated pig stables and 4 separated cattle stables. The total amount of animals depends on their size and the duration of the experiment. Access to the BSL3 animal research facility is offered for a period of maximum 30 days. The access includes specific training in biosafety,

	laboratory and instrument usage as well as scientific advice in designing, planning and analysis of the experiments. The access includes animal work but the laboratory work must be conducted by the guest under guidance of EDI-IVI staff.
	Number of accesses: 3 Duration of each access: 1 month
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Animal species/pathogens	Animal species: Pig, cattle, chicken
that can be worked on in this	Pathogens: IAV, FDMV, CSFV, ASFV, BTV, LSDV,
infrastructure/installation:	PPR, PRV, RVF, PRRSV, Rabies, Flaviviruses (JEV, WNV, KOKV, ROCV, WESSV) and Coronaviruses (PEDV, MERS-CoV, SARS-CoV)
	Installation: BSL3 animal facility
Travel and subsistence costs:	Our Institute provides accommodation possibilities and a restaurant for morning and midday lunches. Reimbursement of costs will be done according to the EDI-IVI accounting rules.
Infrastructure/installation	The ethical rules of our Institute are based on the
ethical rules:	regulations of the local authorities of the Canton
	of Bern, Switzerland. The participants will have to submit their project for approbation to the ethic committee of the Canton of Bern, Switzerland.