

AARHUS UNIVERSITY, DEPT. OF ANIMAL SCIENCE

(DK)

Research topics:	<p>The Dept. of Animal Science is a part of Aarhus University (AU) under the Faculty of Science and Technology, employing 90 -100 researchers and 100–110 technical/administrative staff. Livestock research is carried out with focus on health, reproduction, welfare and quality-promoting strategies while at the same time considering the environment, efficiency and economy. AU has excellent animal experimental and housing facilities for livestock species. The laboratories are functionally divided into analytical chemistry, metabolism analyses, biochemistry, cell biology, endocrinology, hematology, clinical chemistry, molecular biology, proteomics, immunology and microbiology. At AU there is a well-equipped library with access to relevant data-bases. Meeting rooms, office buildings etc. are also of high standard.</p> <p>AU houses a well-established chicken immunology group having more than 20 years of experience. The lab can provide immunological technologies with main focus on chicken antigen specific T cells. AU provides unique access to a panel of 18 inbred and partly inbred chicken lines with defined MHC haplotypes with a special application for the analysis of chicken T cell based immunology.</p>
Activities and services currently offered by the infrastructure/installation:	<ul style="list-style-type: none">• Assistance with assessment of adaptive immune responses in chicken disease models. The main pathogens involved in our own research include Newcastle Disease virus, Marek's Disease virus, Infectious Bursal Disease virus, Infectious Bronchitis virus, <i>E. coli</i>, <i>Salmonella</i> spp. and <i>Ascaridia galli</i>.• Assistance with reproduction from AU MHC lines and sampling of tissue/cells for in vitro assays.• Access to laboratory facilities and assistance with a wide range of molecular biological and immunological methods.

	<ul style="list-style-type: none"> • Access to a flow cytometry platform e.g. for studying T cell functionality. • Access to genetically characterized chicken lines (MHC) and laboratory MHC typing/ characterization methods.
Description of the access to be provided under VetBioNet TNA call:	<p>Modality of access under this proposal:</p> <p>Location of work: Dept. of Animal Science, Foulum, Denmark</p> <p>Duration of work: On average each user or user group is expected to stay 2-4 weeks at the infrastructure</p> <p>Access typically consists of:</p> <ol style="list-style-type: none"> 1.Planning phase: communication about user demands and planning of sample shipment and availability of chicken samples. 2. User at AU: Detailed planning, lab introduction, animal experiment, data generation and supervised analysis. <p>Unit of access: The unit of access is defined as 1 week. One typical access consists of 4 weeks but may be to 2 weeks depending on the user. The user will obtain:</p> <ol style="list-style-type: none"> 1. Access to inbred lines of chickens and chickens kept under SPF conditions; 2. Access to animal infection facilities; 3. Access to laboratories equipped with state-of the art equipment for assessment of chicken adaptive immune responses.
Animal species/pathogens that can be worked on in this infrastructure/installation:	<p>Animal species that can be worked on in this installation: chickens.</p> <p>Pathogens that can be worked on in this installation: All avian pathogens except highly pathogenic avian influenza viruses.</p>
Travel and subsistence costs:	
Infrastructure/installation ethical rules:	<p>Ethical Committee: The Danish Animal Ethics Committee, Chairman: Dr. Peter Sandøe)</p> <p>Animal welfare laws: The Danish Animal Protection Law (Ministry of Justice). Law on</p>

animals' research 1993-3931-28. All trials under permission from the Danish Agency for Experimental Animals 2006/561-1224