



Veterinary Pathologists diagnose and investigate diseases of animals.

"We are interested in understanding adaptive immunity and harnessing this knowledge for diagnostic purposes." Dr. Stefan Keller

Adaptive immunity in health and disease

Host survival is dependent on the recognition of microbes by highly variable receptors on adaptive immune cells. A host's receptor repertoire therefore influences the outcome of an immune response. We are interested in understanding the composition and dynamics of immune repertoires in animals in health and disease.



Improving our toolkit to diagnose lymphoma

Lymphoma is the most common blood cancer in dogs and needs to be differentiated from benign lymphoid proliferations such as inflammation. While lymphoma requires aggressive chemotherapy and is ultimately fatal, inflammation is curable and carries a good prognosis.

We develop genetic tests to diagnose lymphoma more reliably, which ensures prompt and adequate treatment.

Group members/collaborators:

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Diagnosing inflammatory central nervous system diseases

Inflammatory central nervous system (CNS) diseases are difficult to diagnose due to similar clinical presentations and the complications associated with tissue sampling. An underutilized resource is cerebrospinal fluid that is routinely sampled as part of the diagnostic work-up.

Our group is investigating the feasibility of immune profiling to differentiate inflammatory CNS diseases based on 'genetic' signature of the adaptive immune response.

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