

List of VIPER projects for the second cohort

For your application please rank your five favorite projects: with 1 (highest priority) to 5 (minor priority)

No.	PI(s)	Project title	Your ranking 1 to 5
1.	Baumgärtner	Comparative analysis of canine distemper virus cell tropism, replication and translation in canine 2D and 3D neuronal ex vivo culture systems as well as detection of new viruses	
2.	Beineke/ Siebert	Investigation of potential viral etiology and associated pathogenesis in disease syndromes of unknown cause in wildlife and marine mammals	
3.	Jung	Automated unsupervised clustering of viral meta-genomes derived from sequence read archives	
4.	Osterhaus/ Siebert	Virus discovery and characterization platform	
5.	Baumgärtner	Long term consequences of SARS-CoV-2 infection in the lung and the CNS in the golden Syrian hamster model	
6.	Baumgärtner/ Gabriel	Morphologic examination of ciliated epithelia in upper respiratory tract with special consideration of olfactory epithelium after SARS-CoV-2 infection	
7.	Baumgärtner	Investigation of pathogenesis, virulence and immunoreaction following infection with a genetically modified OVA-Theilervirus in a murine model of multiple sclerosis	
8.	Becher	Characterization of recently identified novel viruses from wild boar and other wild animal species	
9.	Becher	Overcoming the airway epithelium barrier in the early phase of bovine viral diarrhea virus (BVDV) infection	
10.	Becker	The role of Card-9 regulated pathways in orthobunyavirus infections	
11.	Becker	The role of Anti-RVfV immunity in Germline infection and behavior modulation in insects	
12.	Beineke/ Ludlow	Identification of intracellular host range restriction factors of canine distemper virus	
13.	Beineke/ Ludlow	Investigations upon the role of C-type lectin receptors in the pathogenesis of Theiler's murine encephalomyelitis virus-induced hippocampal damage	
14.	Gerold	The role of tetraspanins in cross-species transmission of re-emerging alphaviruses	
15.	Gerold	Host factor interactions during early steps of hepatitis C virus cell entry and their interindividual modulation by genetic and pharmacological perturbations alphaviruses	

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16.	Jung	Prediction of miRNAs involved during viral infections using gene-set tests on expression data of mRNA targets	
17.	Osterhaus	Tick-borne encephalitis neuro-pathogenesis	
18.	Osterhaus/ Ludlow	In vitro systems to study antibody escape and antiviral resistance mechanisms during RSV and SARS-CoV-2 infections	
19.	Rautenschlein	Investigations of virulence factors and host-pathogen-interaction of newly emerging Avian Influenza viruses in chickens	
20.	Steffen	Modulation of cellular stress responses in RNA virus infections	
21.	Steffen	C-type lectin receptor interactions of SARS-CoV-2	
22.	Steinmann/ Becher	Host restriction factors in hepatitis E virus replication	
23.	Steinmann/ Becher	Innate immune response to equine hepatotropic viruses	
24.	Gabriel/ Rautenschlein	Coronavirus infections of the reproductive tract in mammals and birds: interplay of hormones and innate immunity	
25.	Kalinke	Treatment of pulmonary infection with genetically modified myeloid cells	
26.	Kalinke	Assessment of antibody-dependent enhancement (ADE) by SARS-CoV-2 specific monoclonal antibodies	
27.	Osterhaus	Exploitation of the TiHo SARS-CoV-2-hamster model under BSL-3 conditions for testing of novel intervention strategies for COVID-19	
28.	Rimmelzwaan	Immunity to CNS infection caused by Rift Valley Fever Virus (RVFV)	
29.	Rimmelzwaan	Towards a better understanding of cell-mediated immunity to Respiratory Syncytial Virus (RSV)	
30.	Sutter/ Baumgärtner	Biodistribution and reactogenicity of SARS-CoV-2 antigens delivered by MVA candidate vector vaccines against COVID-19	