

<b>Title</b>	Targeting TLR2 for improved veterinary vaccines
--------------	---

<b>Keywords</b>	Vaccines; Adjuvants; Toll-like receptor 2; Mucosal responses; Immune memory
-----------------	---

<b>Summary</b>	<p>Sustained human and animal health is highly dependent on the availability of efficacious and safe vaccines. However, despite the remarkable achievements in this area, developing successful vaccines against many infectious diseases has remained a major challenge. Several reasons for these failures are well identified: the induction of inadequate effector mechanisms; the absence of immune memory at the relevant organs; short immune memory. The adjuvants clinically available have very limited capacities to control most of these features. Therefore, the identification of novel strategies to programme the type, location and duration of the adaptive immunity is a priority in current vaccinology. The objective of this project is to determine how TLR2 activation can be used to tailor long-lasting adaptive immune responses, with different properties, at relevant tissues. The ultimate goal is to develop innovative adjuvant formulations, assess them in preclinical studies, and render them ready for the development of future veterinary vaccines.</p>
----------------	--

<b>Supervision</b>	
Supervisor	Afonso Basto (CIISA, FMV-UL). <a href="mailto:abasto@fmv.ulisboa.pt">abasto@fmv.ulisboa.pt</a>
Co-Supervisor	Alexandre Leitão (CIISA, FMV-UL)