

# Differentiation and Regulation of Bovine Th2 Cells in vitro

Anmol Kandel<sup>1\*\*</sup>, Lei Li<sup>1\*\*</sup>, Yan Wang<sup>2\*</sup>, Wenbin Tuo<sup>3</sup> and Zhengguo Xiao<sup>1\*</sup>

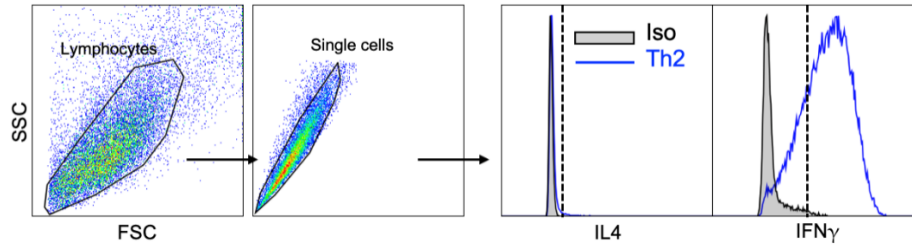
<sup>1</sup> Department of Animal and Avian Sciences, University of Maryland, College Park, 20742, MD, USA; [akandel1@umd.edu](mailto:akandel1@umd.edu) (A.K.); [lixx242@umd.edu](mailto:lixx242@umd.edu) (L.L.)

<sup>2</sup> Mass Spectrometry Facility, National Institute of Dental and Craniofacial Research, National Institutes of Health, Bethesda, MD 20892-4370, USA; [yan.wang2@nih.gov](mailto:yan.wang2@nih.gov)

<sup>3</sup> Animal Parasitic Diseases Laboratory, USDA/ARS, Beltsville, MD 20705 USA; [wenbin.tuo@usda.gov](mailto:wenbin.tuo@usda.gov)

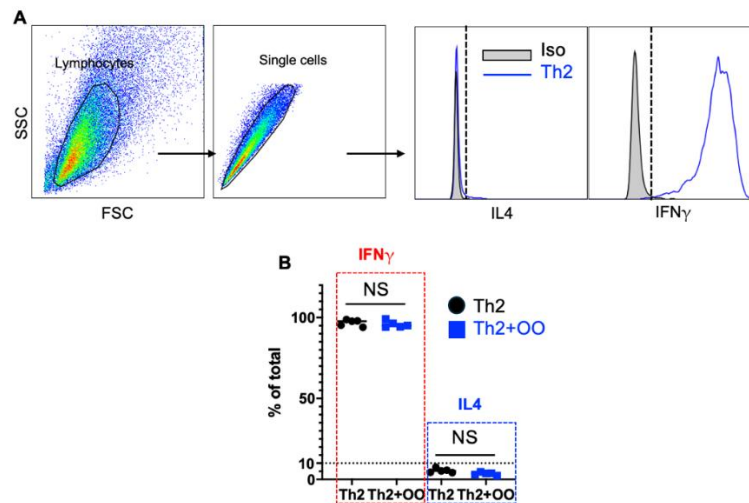
\* Correspondence: [xiao0028@umd.edu](mailto:xiao0028@umd.edu); Tel.: +1-301-405-6258; [yan.wang2@nih.gov](mailto:yan.wang2@nih.gov); Tel.: +1-301-347-8027.

**Figure S1.**



**Figure S1.** Extra recombinant bovine IL4 leads to enhanced Th2 differentiation. Naïve CD4<sup>+</sup> T cells were differentiated under Th2 condition in the presence of additional recombinant bovine IL4. Gating strategy for IFN $\gamma$  and IL4.

**Figure S2.**



**Figure S2.** OO parasite extract leads to inhibition of Th2 differentiations. Naïve CD4 T cells were differentiated in the presence or absence of OO under Th2 condition as described in **Fig 2B**. Cells were harvested and analyzed for production of IFN $\gamma$  and IL4. A: Gating strategy for IFN $\gamma$  and IL4. B: Comparison of production of IFN $\gamma$  and IL4 in Th2 vs Th2+OO.