

## **Deciphering the role of transcription factors in the virulence factor expression in *Toxoplasma gondii*.**

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*Toxoplasma gondii* is the cause of abortion or serious malformations in the fetus of infected pregnant women. The proliferation of the tachyzoite stage is crucial for the pathogenesis of this parasite in humans. This form of the parasite expresses virulence and invasion factors which are essential for its survival in the human host. The expression profile of these factors is strictly regulated during the cell cycle. Indeed, these proteins must be produced in a short period of time in order to be inserted into specific organelles (micronemes and rhoptries). However, the actors responsible for controlling and establishing this specific expression profile are not known. We propose to try to discover them. We will study new transcription factors of the ApiAP2 family which are potentially involved in the regulation of the expression of these genes. Using reverse genetics, transcriptomic and proteomic methods, we will discover the role of these regulators in the expression of key genes for virulence.