INDUCTION AND REGULATION OF CONOID EXTRUSION IN *Toxoplasma gondii*

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Cell invasion by the intracellular parasite *Toxoplasma gondii* occurs through an active process that involves dynamic events, such as gliding motility and conoid extrusion. Conoid is an apical truncated hollow cone that functions like a probe by pushing the host membrane during the invasion followed by the sequential secretion from specialized secretory organelles which components affect host membrane integrity with the formation of a hole through which the parasite internalizes within a parasitophorous vacuole. Its activation and mechanisms involved in its regulation are unknown. By testing several conditions we found a method to induce conoid extrusion in purified extracellular parasites in a reversible and reproducible way. By using inhibitor drugs for different molecules involved in signal transduction we were able to characterize the regulation mechanisms of conoid extrusion as a process closely associated to the subpelicular cytoskeleton as was detailed characterized by TEM.