

INTRAVACUOLAR ORGANIZATION OF PARASITE *Toxoplasma gondii*: A ROLE FOR THE RESIDUAL BODY

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Toxoplasma gondii resides within an intracellular parasitophorous vacuole, surrounded by a membranous network whose function remains unclear. By detaching the apical membrane of infected cells, processed for SEM, it was possible to study the intravacuolar distribution of parasites. Depending on the infected cell phenotype, *Toxoplasma* organizes in two intravacuolar arrangements, as “rosettes” with parasites arranged around a residual body and as “clusters”. The residual body was characterized as a structure derived from the mother cell that maintains parasites joined through their posterior end, contributing to the rosette organization. Evolution of intravacuolar replication and network formation of *Toxoplasma* during endodyogeny was characterized by the SEM modified method. Our results suggest that the network and the residual body would be complementary intravacuolar structures necessary to maintain inter-parasite cohesion and to determine the intravacuolar parasite organization.