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## SUMMARY OF THESIS\*

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HIRAMOTO, Roberto Mitsuyoshi – **Avaliação da resposta imune humoral e celular, em camundongos inoculados com taquizoítos irradiados de *Toxoplasma gondii***. São Paulo, 2002. (Tese de Doutorado – Instituto de Pesquisas Energéticas e Nucleares/Autarquia associada à Universidade de São Paulo).

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### EVALUATION OF THE CELLULAR AND HUMORAL RESPONSE IN MICE INOCULATED WITH IRRADIATED TACHYZOITES OF *Toxoplasma gondii*

**Objectives:** Evaluate the cellular, humoral immune response and the protection against oral challenge in mice, induced by 255 Gy *T. gondii* irradiated tachyzoites in a source of  $^{60}\text{Co}$   $\gamma$ -rays.

**Material and Methods:** *T. gondii* tachyzoites were irradiated with 255 Gy, maintained in nitrogen and freezer. C57Bl/6j mice were immunized with irradiated tachyzoites (3 doses). The humoral and cellular response in immunized mice was analyzed. The immunized mice with 255 Gy irradiated tachyzoites (3 doses) were challenged, by oral route, with ME-49 *T. gondii* strain, mortality and quantification of cysts number was analyzed.

**Results:** The mice immunized with irradiated tachyzoites presents

right levels of IgG antibody specifics, which recognized *T. gondii* proteins. The mice spleen cells presents lymphoproliferative response and cytokine profiles similar to those produced by chronic infection. The mice immunized with irradiated tachyzoites displayed minimal cerebral pathology and low cysts numbers after oral challenged with ME-49 strain.

**Conclusions:** The 255 Gy  $\gamma$ -rays irradiated *T. gondii* tachyzoites induce immune response in mice, similar chronic infection, with partial protection after challenge with ME-49 strain, presenting decrease of the cerebral pathology and cysts numbers.

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