

## **Abstract**

The main topic of this thesis are the protein secretion processes in several important human parasites – *Toxoplasma gondii*, *Plasmodium falciparum*, *Trypanosoma cruzi*, *Leishmania spp.* and *Giardia intestinalis*. Described here are the parasite's and the host proteins which participate in the pathogenic processes involving the protein secretion. As shown here, the protein secretion into the host environment is one of key tools serving the parasite to survive within and manipulate the host organism. Interestingly, different parasitic organisms use functionally and evolutionary distinct strategies to fulfill this aim.

## **Key words**

secretory pathway, translocon, signal sequence, *Toxoplasma gondii*, *Plasmodium falciparum*, *Trypanosoma cruzi*, *Leishmania spp.*, *Giardia intestinalis*