

Offer of topics for Ph.D. study projects in Third Faculty of Medicine, Charles University in Prague

Project:	Epistatic control of development of infectious disease
Mentor (Advisor):	Assoc. Prof. Marie Lipoldova, PhD.
Department:	Institute of Immunology/Institute of Molecular Genetics, AS CR
Contact information:	lipoldova@img.cas.cz; 224310195
Project Narrative: (<i>max. 500 characters including spaces</i>):	Epistasis plays an essential role in development of most diseases, but most interacting genes are unknown. We developed mouse model with a strong epistatic effect on susceptibility to leishmaniasis. <i>Leishmania</i>-susceptible B10.O20 mice carry 4% and 96% genes, respectively, of resistant strains O20 and C57BL/10. To define functional basis of this epistatic control we will map the O20 genes causing B10.O20 susceptibility and measure gene and pathway expression patterns in control and infected mice.
Requirements for student applicants: (<i>specify your requirements such as degrees or period after degree was granted</i>)	M.Sc. degree or equivalent in genetics, molecular or cellular biology, parasitology, biomedicine, strong interest in basic research and experimental work, good English