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Supervisor's view on doctoral candidate Václav Brož and his thesis:"Role of IDGFs and adenosine signaling in cell survival and energy homeostasis".

The doctoral work of Vašek Brož is a part of large project of our laboratory on the regulation of insect cell growth. This work is also a continuation of an old collaborative project we started many years ago in the laboratory of Peter J. Bryant at University of California, Irvine. It took us many years to establish the necessary methods and collect the equipment needed for such a work. Even more importantly, this task required a student, which would be skillful, patient and tough to fight all the obstacles. A final goal of our research is the clarification of mechanisms needed for the maintenance of body homeostasis and the elimination of clonal tumor cells induced in *Drosophila in vivo*. Thanks to the methodology available in *Drosophila* we can perform research on both cell cultures and *in vivo* in parallel. Vašek characterized responses of imaginal disc cell line Cl.8+ to IDGF growth factors and adenosine stress signaling, which seem to faithfully reproduce the behaviour of mosaic clones *in vivo*. Vašek was also involved in the characterization of adenosine receptor and genetic analysis of imaginal disc growth factor 3. Vašek's results were included in 4 publications, including one in which he is the first author. In addition, a large part of his work is being prepared for several more papers.

I have known Vašek since 2008, when he started to work on his MSc thesis in my laboratory. He is a very shy and modest introvert person, who likes to work in the team. He became more and more important member of our laboratory and spent a lot of time by teaching newcomers to our group. During his Ph.D. study he showed that he is a fast learner who was able to work completely autonomously and bring a number of new ideas. During his Ph.D. he also visited the laboratory of Dr. Dana Carroll (Univ. Salt Lake City, USA) for almost two months. He became indispensable for the work with *Drosophila* tissue cultures, including cell growth and cytometry assays, baculoviral expression, adenosine transport assays, recombineering etc. His experience in the laboratory, determination, diligence and stable character can make him a very valuable member of any research team. I am quite impressed by his ability to handle difficult projects and his sense of responsibility.

Vašek has has the ability to become a great scientist and I strongly recommend his dissertation for defense as the basis for the award of the Ph.D. degree.

Michal Žurovec