

FACULTY OF SCIENCE

University of South Bohemia in České Budějovice Branišovská 31, 37005 České Budějovice

Mgr. Tomáš Doležal, Ph.D. – Department of Molecular Biology tel. 387772229, E-mail: tomas.dolezal@prf.jcu.cz

Mentor's statement about the bachelor thesis of Eugen Kubala

(Study of the Role of Mutations L39Q, L49Q and N78T of Casein Kinase I epsilon in Breast Cancer Using *Drosophila Melanogaster* as a Model organism)

In spring 2009 we were in very stressful situation with our project trying to functionally characterized breast cancer mutations using *Drosophila melanogaster* as model when after two years of work we were unable to produce the desired mutants and the grant agency put strong pressure on us to produce results (as I found later, they were serious with their pressure). I decided to try one more genetic trick to get the mutations into the fly's genome. This included an injection of the mutated DNA constructs into the Drosophila embryos and creating the transgenic flies (not a simple procedure). There were three such constructs so I decided to do one by myself, one would be done by our research technician Kateřina Kučerová and I left one for Eugen as an interesting (or at least I thought it would be an interesting) bachelors degree project. From his results it seems that I left to Eugen (unintentionally) the hardest and the most problematic one. While me and Katka, we got the transgenic flies (not without problems), Eugen even in spite of quite a big effort could not get any. I regret now that I did not try to help him with his construct (although it seems it might not help him at all) but that time was really very stressful and I just had to completely focus on whatever we got out of this project and that was the characterization of the obtained mutants.

So first I have to say that I admire Eugen that he tried really hard although it was during the process of injection more and more discouraging for him. He also brought kind of a relaxed atmosphere into the lab which was very good for us but on the other hand Eugen is sometimes too relaxed (not always good in science) but always very friendly person. In the beginning he has some troubles to understand the genetic crosses allowing the mapping the transgenic insertion which are little complicated. Ironically, when he finally clearly understood the crossing scheme he did not need it; still, it is a part of his thesis as a good manual.

Although Eugen was not successful in his attempt, his results are nevertheless valuable for us, hinting what the effects of mutations could be and we might further test them in a different way; as classic says: "Someone has to get there and say: No, not this way, dear friends!"

Eugen wrote quite independently his thesis which is surely satisfactory for me and I can honestly say that Eugen Kubala deserves the Bachelors degree.

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Mgr. Tomáš Doležal, Ph.D.