

Jihočeská univerzita v Českých Budějovicích University of South Bohemia in České Budějovice Czech Republic

## **Confidential**

## Supervisor's Review of USB RIFCH PhD Thesis

Surname of the PhD student: <b>Dzyuba Viktoriya,</b> MSc, PhD	Name of supervisor: Cosson Jacky Ph.D., Dr.h.c.
Title of PhD thesis: Role of regulatory proteins in fish sp	erm motility

## **OVERALL COMMENTARY ON THE PhD THESIS**

Since Viktoriya joined our research group, the later mostly dealing with fish sperm physiology, several previously missing analytical fields have been fruitfully developed thanks to her skills and constant needs to perfect methods adjoined with curiosity as an additional and positive quality. During her experimental PhD work, she covered several new fields of investigation in fish sperm physiology, mostly regarding energetic management in those intensively motile cells, either during their short swimming period, but also in connection with their acquisition of the ability to move (final maturation).

These studies have needed for her to acquire the know-how in various topics such as the proteolytic enzymes or the role of oxidant/anti-oxidant system in the control of some sperm functions, or investigation of enzymatic activities present in fish sperm flagella, all tasks that she has demonstrated to be able to carry out with great success. Obtaining results implies for any scientist a correlated quality that of publishing them and this precisely another quality that has allowed Viktoriya to carry out the publication of 8 manuscripts, the redaction of which turned out to reveal her precious ability to formulate these results in a comprehensive way. Without entering in the details in her publications, she published as co-authors papers dealing with fish sperm, such as 1- a review paper on signaling in the motility process, 2- an experimental investigation on the energetics controlling carp and sturgeon spermatozoa, 3- a multifacetted study composed of several publications exploring the maturation process in sturgeon spermatozoa, the latter involving the intervention of proteolytic activities as well as oxidant/anti-oxidant systems present in sperm cells and seminal fluid, 4- a study on the role of these systems in tench sperm.

Results of these studies were also disclosed as oral and poster presentations in 4 international conferences. Viktoriya also participated to teaching as trainer in summer schools and attended several abroad stays for improvement of her variety of skills.

Viktoriya is a mature scientist with a long-term experience in research, a feature partly explaining her independence that she succeeds to combine with her sense of sociability appreciated by all around her as well as an open ear to advices and suggestions from colleagues and her supervisor as well.

Altogether and all along the period of Viktoriya's PhD, my role of supervisor has constituted for me a successful association during which I have learned a lot through this collaboration that I wish to be able to pursue after her Thesis defense. This is an additional reason for me to warmly recommend that Viktoriya defends her thesis.

## FINAL RECOMMENDATION

can be recommended for defence of PhD Thesis can be recommended with reservations for defence of PhD Thesis can not be recommended for defence of PhD Thesis	
30.4. 2015 VODNANY  Date and place	surname and signature