

Supervisor's evaluation of Mgr. Ján Štěřba, a student in the doctoral program of Molecular and Cell Biology and Genetics


Mgr. Ján Štěřba submitted his Ph.D. thesis entitled '*Glycobiology of Ticks and Tick-borne Pathogens Glycans, Glycoproteins, and Glycan-binding Proteins*' to defend it, and accomplish his doctoral studies at the Faculty of Science of the University of South Bohemia in Ceske Budejovice. Janko, as we call him, joined my laboratory at the Institute of Parasitology, BC AS CR in Ceske Budejovice quite long time ago, actually nearly 8 years ago, and afterwards once we succeeded with our research centre proposal he became as a doctoral student one of the key member of a faculty part of the Research Centre of Molecular Ecology of Vectors and Pathogens (LC 06009). In very beginning of his work on his thesis, Janko had focused primarily on glycosylation in spirochetes of lyme borreliosis (LB). Taking advantage of our research co-operation with laboratory of Dr. Susan Logan in the NRC - Institute for Biological Research in Ottawa, Canada (2007) he casted doubt a glycosylation of flagellin and outer surface proteins at last in the case of one of standard species/strains of LB spirochetes. He succeeded with publication of this quite important piece of knowledge giving us suspicious of the lack of glycosylation in LB spirochete unlike some other bacteria. Afterwards, we draw the main attention of Janko's dissertation towards selected tasks associated tightly with glycans and carbohydrate binding proteins in ticks with main emphasise for modern techniques of glycomics and glycoproteomics. Fortunately, Janko could take advantage of just by chance made connection with Professor Milos V. Novotný, and to work for a few months repeatedly in his laboratory at Indiana University in Bloomington, IN, U.S.A. Both two secondments made Janko opportunity to amplify markedly his knowledge and skills in glycomics and glycoproteomics that he gained first within his first abroad experience in Ottawa. Janko has done a considerable quantity of the high quality research in tick and tick-borne pathogens glycobiochemistry, having already published as an author or co-author 5 research papers, 1 book chapter accepted, another article in revision, and one more nearly submitted. Besides these publications, 16 presentations at national/international conferences.

Mgr. Ján Štěřba falls among those colleagues that they feel clearly as an essential need of sharing both theoretical and experimental knowledge in teaching of students and providing them fundamental practical experience, patiently explaining them principles of laboratory techniques, etc. Janko started to help me/us with the laboratory course on Biochemistry right after he joined my lab and since that time he has taken over this practical teaching obligation (the only original laboratory course has proliferated in a few including those running in English for our Biological Chemistry students) which is one of most demanding teaching duty in terms of time, energy and responsibility that one can imagine. Nevertheless, this is far of completed list of Janko's teaching activities, he has been lecturing his own course 'Introductory to Toxicology and Farmacology' (including a practical course), and lately a new course in English for Biological Chemistry master students entitled 'Xenobiochemistry and Toxicology', and contributing to other courses like 'Glycobiochemistry', 'Advances in Biological Chemistry', etc. In addition to above suggested activities and contributions, I would not like to forget to mention how important Janko's contribution was through whole time he had joined our laboratory. As a senior graduate student he had taken care and responsibility as a 'lab chief-manager' about techniques and methods properly running in the lab, supplying with consumables/laboratory tools as well as taking care about and guiding students working on their bachelor (~ 9) and master (~4) theses.

Going throughout both research and teaching activities/load of Mgr. Ján Štěrba one must clearly realize that we have met hard working and highly gifted young researcher as well as a university teacher (currently, a faculty member of the Institute of Chemistry and Biochemistry). As a supervisor and a former boss I would like to take advantage of this opportunity to thank Janko for such great work he has done working on his dissertation in our lab, to express my wish to keep our co-operation ongoing in further future.

In conclusion, as a supervisor, I am pleased and delighted to recommend the doctoral thesis submitted by Mg. Ján Štěrba for its defence to receive a 'Doctor of Philodophy' degree (a Ph.D. title).

In Ceske Budejovice, February 18, 2012



prof. RNDr. Libor Grubhoffer, CSc.