

November 9, 2004

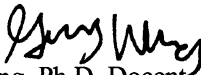
To Whom It May Concern:

This letter is in support of Dr. Markéta Marvanová. Markéta was a graduate student in the Laboratory of Functional Genomics and Bioinformatics at the A.I. Virtanen Institute Graduate School, University of Kuopio, FINLAND from 2000-2003. She began her studies after rotations in the Pharmacology and Toxicology Department and her thesis was defended in the winter term a year ago. She is a trained pharmacist from the Czech Republic.

Markéta was the top scientist in my laboratory and arguably among the top in the university. Her thesis work used functional genomic and bioinformatics approaches to investigate the genomic effects of memantine, a low affinity NMDA/glutamate receptor antagonist. Memantine is currently the only treatment available for late-stage Alzheimer's disease and has been prescribed for a variety of neurodegenerative conditions. Markéta has found that brain-derived neurotrophic factor and several novel ESTs are regulated by this drug. Recently, she has discovered neuroanatomical differences in gene expression between human and nonhuman primates (apes and monkeys) that help explain why age-related neurological disorders are human specific and questions whether monkeys are valid experimental animal models for human neurodegenerative diseases. She has expertise in microarrays, bioinformatics, the model organism *C. elegans*, and protein techniques that has led to discoveries in region specific brain differences that altogether shed new light on mechanisms of neuroprotective drugs and human origins of neurological disorders.

She is also a wonderfully talented and well organized person. She has taught courses by giving lectures, teaching labs, and organizing exams. The courses she has participated as a teaching assistant include: MBI250 Microarrays in which she guided 20 students in the lab portion (20 hours). She has also provided basic lectures in the microarray course, MBI 260 Functional Genomics course, and the MBI 280 Model Organisms course at Kuopio University. These courses are for 3<sup>rd</sup> and 4<sup>th</sup> year undergraduate and graduate students in the biosciences. The reviews from the students have been very positive on her behalf, and I can concur with their opinions. She is especially adept at explaining complicated concepts in a clear and concise manner and in providing challenging examination questions.

She has also been unselfish with her time and has helped to consult with other laboratories at the university as well as helped orient and train new incoming students. Markéta is an outstanding student and it's my great fortune to be her mentor. She has two doctoral degrees: a Doctor of Philosophy in Pharmacology from Kuopio University with four published papers and a Ph.D. from her home Charles University in the Czech Republic with two published papers and a significant amount of unpublished data. Markéta has also been very active on her own behalf and brought some of her own funding to Kuopio including a CIMO grant and French Embassy Award. Without hesitation, I would recommend highly and without reservation Dr. Marvanová.

Sincerely,   
Garry Wong, Ph.D. Docent  
Research Director