Universität Heidelberg

Universitätsklinikum Heidelberg | INF 305 | 69120 Heidelberg

Farmaceuticka fakulta v Hradci Kralove, Univerzita Karlova
Heyrovskeho 1203
500 05 Hradec Kralove
Czech republic

Inaam Nakchbandi, MD, FACP
Professor in Medicine
Max-Planck Institute for Biochemistry
and University of Heidelberg
Im Neuenheimer Feld 305, 2. OG, R210
69120 Heidelberg
Germany
Tel: +49-6221-56-8744 / -4815
Fax: +49-6221-56-5611
E-mail: inaam.nakchbandi@urz.uni-heidelberg.de

Heidelberg 26.05.2011

To Whom It May Concern

This is a letter evaluating the work and output of Alžběta Lejsalová who performed her Diploma thesis work for her study in Pharmacy in Heidelberg in my lab starting in October 2011 and ending in February 2011.

In my lab we work on the role of matrix proteins and matrix receptors in various disease models. The project of Alžběta Lejsalov is based on findings by our lab that an isoform of fibronectin that is O-glycosylated inhibits osteoblast formation. The circulating levels of this isoform are increased in patients with chronic cholestatic liver disease and this correlated negatively with a marker of bone formation suggesting that it is responsible for the hepatic osteodystrophy seen in these patients. *In vitro* experiments showed that deglycosylation of the isoform resulted in normal osteoblast differentiation as compared to the untreated isoform that resulted in decreased osteoblast differentiation.

Alžběta Lejsalov was able to transfect a tumor cell line that can produce the glycosylated isoform with *sh*RNA to prevent endogenous fibronectin production and also introduce two single mutations and one double mutation in a fibronectin contruct. These mutations would prevent the O-glycosylation of the fibronectin isoform. She also was able to transiently transfect two of these constructs in the modified tumor cell line that lacked endogenous fibronectin production.

She had no prior lab experience when she started, which meant that initially she needed to be closely mentored by the lab personnel. She however was then able to learn very quickly and advance the project at the pace we expect from a biology student in their diploma work. Her work ethics were superior and her performance was in the top 10% of students at her level of training.

Should you have any further questions please do not hesitate to contact me.

Sincerely,

Inaam Nakchbandi