

**UNIVERZITA KARLOVA
FARMACEUTICKÁ FAKULTA V HRADCI KRÁLOVÉ**

Katedra farmakologie a toxikologie

Studijní program: Farmacie

Posudek vedoucího / konzultanta diplomové práce

Autor/ka práce: **Tereza Andrašková**

Vedoucí/školitel/ka práce: PharmDr. Ivan Vokřál, Ph.D.

Rok zadání: 2016

Konzultant/ka práce: Prof. Dr. Alexandra K. Kiemer

Rok obhajoby: 2019

Název práce:

Cell senescence in aging, cell stress and chemoresistance

Téma práce si autor/ka si vybral/a z nabídky katedry.

Práce s literaturou autora/ky byla Výborná.

Jazyková vybavenost autora/ky byla Výborná.

Invence autora/ky byla Výborná.

Iniciativa autora/ky byla Výborná.

Autor/ka pracovala samostatně, velmi zodpovědně.

Problémy, pokud se vyskytly, řešil/a zcela samostatně.

Metodická zdatnost a zručnost autora/ky byla výborná.

Interpretace výsledků byla správná a zcela samostatná.

Hodnocení výsledků v kontextu jiných prací bylo velmi zodpovědné.

Práce v kolektivu, kooperativnost autora/ky byla výborná.

Zpracování textu práce bylo správné a zcela samostatné a bylo velmi pečlivé.

Grafická a jazyková úprava byla výborná.

Působení autora/ky na katedře bylo mimořádně přínosné.

Doporučuji diplomovou práci k uznání jako práci rigorózní

Slovní hodnocení, výrazné rysy autora/ky a práce:

Studentka Tereza Andrašková vypracovala svou diplomovou práci v rámci programu Erasmus na pracovišti Universtität des Saarlandes, Faculty of Natural Sciences And Technology pod vedením profesorky Alexandry K. Kiemer. Dle vyjádření pracoviště byla Tereza schopným a oblíbeným členem týmu a její práce byla pro pracoviště velkým přínosem. Dopis s hodnocením přikládám jako přílohu k tomuto posudku.

Celkové hodnocení, práce je: výborná, k obhajobě: doporučuji

V Hradci Králové dne 20.9.2019

.....
podpis

To the
Charles University
European Office
Ovocný trh 3
116 36 Prague 1
Czech Republic

ref. number

date June 13, 2018

Re Reference letter for Ms. Tereza Andrašková

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To whom it may concern:

It is my pleasure to write this reference letter for Ms. Tereza Andrašková regarding her diploma work during her ERASMUS stay in my group at Saarland University.

Tereza was part of my group between October 2, 2017 and April 11, 2018. My group works on pathomechanisms in inflammatory diseases, such as arteriosclerosis, inflammatory lung diseases, and cancer. In the lab different molecular biological, biochemical, and analytical methods are routinely used to uncover these pathomechanisms. Tereza quickly learned to independently and accurately perform a set of these established methods, such as cell culture, cytotoxicity tests, or DNA isolation. In addition, Tereza set up two techniques not available in my lab so far. Keeping in mind that during her education Tereza never had any experience in cell culture work, molecular biological, and biochemical methods, this is an impressive accomplishment.

One of these techniques established by Tereza is a PCR-based assay to measure the length of telomers in order to determine the age of cells or tissues. The other is a β -galactosidase staining, which can be used to test for cellular senescence in cultured cells. Tereza nicely set up both techniques, which is highly challenging in less than six months. Since she not only used cell lines, but also primary cells, she had to learn how to cultivate primary human endothelial cells and had to go through many rounds of testing different cell types and treatments. She also performed the β -



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galactosidase staining in doxorubicin-resistant cells, which are rather difficult to keep in culture since they have to be cultivated in doxorubicin-containing medium and grow rather slowly. For the establishment of the two new techniques Tereza searched the literature and established the protocols very independently. We regularly discussed her advancement in the lab and Tereza always proved to be well prepared and very competent.

Taken together, I would clearly rate Tereza among the top 10% of the students I have supervised.

In addition to her hard work in the lab Tereza was eager to learn German and therefore joined a German course during her stay.

Finally, I would also like point out that all my group members got to know Tereza as a very cooperative, friendly and open-minded personality. We would be pleased to have her with us in the future.

I strongly recommend Tereza to do a PhD after finishing her undergraduate studies at Charles University.

Sincerely,

Alexandra K. Kiemer, Ph.D.
Professor of Pharmaceutical Biology

