

ADAM MASTER

Cover letter



Personal Statement

I am writing to apply for a post-doctoral fellowship or other developing position in the field of my previous scientific experience, particularly in my special research interest: translational control in cancer, molecular diagnostics and genetic engineering.

Translational control is a mechanism of protein synthesis regulation emerging as an important target for new therapeutics. Therefore, I have elaborated some proposals/projects in the field of gene therapy of cancer cells based on gene expression regulation at the level of translation. In my last research project, it has been demonstrated for the first time that the newly discovered phenomenon of small RNA-induced gene activation can also enhance protein translation by acting at sequence-specific targets within the messenger RNA 5'-untranslated region (5'UTR). The results are the first showing a method for gene-specific translation enhancement using selective trans-acting factors designed to target specific 5'UTR cis-acting elements of high regulatory potential (Master et al., 2016). This simple strategy may be developed in the future to complement other available methods for gene expression regulation including gene silencing. The method used for enhancement of protein expression has the potential to be transferred to increase the translation efficiency of any suitable target gene and may have future application in gene therapy strategies to enhance expression of proteins such as tumor suppressors. In my future work, I would like to transfer the knowledge into the scientific projects of your interests.

Moreover, as a leader of the Laboratory of Molecular Medical Biology at BioTe21, I have acquired the expertise, leadership and motivation necessary to successfully carry out the proposed studies. This work, together with my Ph.D studies at The Center of Postgraduate Medical Education allowed me to acquire the experience as a project coordinator and co-investigator on several government- and European-funded grants. I successfully collaborated with other researchers, administered the projects (research, budget, staffing) and produced peer-reviewed publications from our research, however my real passion is laboratory science. I am proficient in creation of proposals and scientific projects in the field of my interests and research. As a result of these experiences, I am aware of the importance of consistent work in laboratory, communication among project members and of constructing a realistic research plan and budget. In addition, I am a member of the National (polish) Chamber of Laboratory Diagnosticians, the (british) Society for Endocrinology and the American Society of Gene & Cell Therapy, that give me a platform to communicate with international science experts, allowing for improvement of any research concept.

Detailed on my resume, you will find a solid background in molecular medical cell biology and genetics. I have completed full-time Ph.D studies in medical biology from the MCPE in Warsaw. The doctoral research was focused upon elucidating the mechanisms in which UnTranslated Regions (UTRs) can effects the expression of T3-dependent nuclear thyroid hormone receptor β 1 (TR β 1) in human clear cell renal cell carcinoma (ccRCC). The study have given me a strong background in scientific methodology. In addition, as an alumnus of a Jagiellonian University (the best and the oldest university in Poland, established in 1364) and Cracow University of Technology, I know and value the excellent university and technical education, that allows me to solve problems in medical bio-technologies.

Summarizing, as a result of my research work, I am confident that I could make a strong contribution to your projects. I need further development as an scientist and with the knowledge I posses and desire to learn more, along with my creative abilities make the post-doc study a natural choice for me. I am sure that the work with you will definitely widen the horizons of my knowledge and help me attain a milestone in my scientific career. I am a stern believer of attitude, quality, and hard work. Thank you for your time and consideration.

Personal web page (full resume): <http://www.gene-factory.com>

Yours faithfully
Adam Master