Milena Tileva - milenatileva@bio21.bas.bg

Milena Tileva has completed her MSc in Biotechnology in the Department of Biotechnology, University of Chemical Technology and Metallurgy, Bulgaria, in 2011. Since 2009 she has been working as a research fellow at the Institute of Molecular Biology "Roumen Tsanev", BAS and she is currently doing her PhD under the supervision of assoc. prof. G. Nacheva and acad. I. Ivanov. Milena's scientific work has been cantered on the development of antagonists of human interferon gamma (hIFN γ) with potential therapeutic application for treatment of autoimmune diseases related to abnormal production of this cytokine. Milena's main field of study has been focused on the recombinant protein production design, purification and stabilization, protein structure and function, development of therapeutic proteins.

Specializations abroad:

1. Internship at the Institute of Structural Biology (IBS), Grenoble, France

2. Internship at Proteros Biostructures, GmbH, Martinsried, Germany

Participation in projects supported by BNSF:

- "Molecular design and constriction of recombinant competitors of the human interderon gamma: a novel strategy for treatment of autoimmune diseases and grafts", "Ideas" 2009, DID 02/30 from 17.12.2009, Project coordinator: acad. Ivan Georgiev Ivanov, Institute of Molecular Biology "Roumen Tsanev" (2009-2013)
- "Virtual and experimental study of the interaction between cytokines and their receptors", "Young Scientist" 2011, DMU 03/23 from 12.12.2011, Project coordinator: Assoc. Prof. Dr. Peicho Stoev Petkov, Sofia University "St. Kliment Ohridski", Faculty of Physics (2011 -)
- "Structural and-functional characteristic of human interferon-gamma and its recombinant antagonists", Bilateral program for integrated activates of Bulgaria and the French Republic", RILA 2015-2016, DRILA 01/14 from 17.04.2015, Project coordinator: assoc. prof. Genoveva Atanasova Nacheva, PhD, Institute of Molecular Biology "Roumen Tsanev", (2015-)
- "Clinical, neuropsychological, electrophysiological and biological markers for early diagnosis of neurodegenerative diseases with dementia", "Funding of fundamental scientific research, 2016, H 03/41, Project coordinator: prof. Lachezar Trajkov, Medical University, Sofia, (2016-)
- 5. The role of the glycolytic enzyme glucose 6-phosphate isomerase in DNA repair", Funding of fundamental scientific research, 2016, H 01/70, Project coordinator: prof. Roumyana Mironova, Institute of Molecular Biology "Roumen Tsanev", (2016)

Participation in projects supported by other sources:

- 1. Inactive analogues of the hIFNγ to be used for treatment of autoimmune diseases, TIGO, GmbH, **Tigo – 01/2006, addendum 2015, Project coordinator: acad. Ivan Georgiev Ivanov**
- 2. Ministry of Education, Youth and Science, program "Science and Business" BG051PO001-3.3-05 for "Scientific research performed in high-technology scientific complexes"

Publications:

1. <u>M. Tileva</u>, E. Krachmarova, I. Ivanov, K. Maskos, G. Nacheva, Production of Aggregation Prone Human Interferon Gamma and Its Mutant in Highly Soluble and Biologically Active Form by SUMO Fusion Technology, *Protein Expr. Purif.* 117 (2016) 26-34. doi: 10.1016/j.pep.2015.09.022

2. Sashka Krumova, Svetla Todinova, <u>Milena Tileva</u>, Latifa Bouzhir-Sima, Marten H. Vos, Ursula Liebl, Stefka G. Taneva. Thermal stability and binding energetics of Thymidylate Synthase ThyX. *Int J Biol Macromol.* (2016). doi: 10.1016/j.ijbiomac.2016.05.083

3. P. Leister, <u>M. Tileva</u>, E. Krachmarova, G. Nacheva, Expression of human interferon-gamma gene in human tissue culture cells, *Biotech. Biotechnol. Equ.* 27 (2013) 3573-3576. doi:10.5504/BBEQ.2012.0128