

Elena Krachmarova - elenakrachmarova@bio21.bas.bg

Elena Krachmarova has completed her Masters' degree in Biotechnology in Sofia University of Chemical Technology and Metallurgy in 2010 and has been working at the Institute of Molecular Biology "Roumen Tsanev" (IMB) at the Bulgarian Academy of Sciences ever since. Currently Elena is PhD student at IMB under the supervision of Assoc. Prof. Genoveva Nacheva and Acad. Ivan Ivanov. Her research is focused on the reasons for aggregation of recombinant hIFN γ and its derivatives in eukaryotic and prokaryotic expression systems.

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:

1. "Molecular design and construction of recombinant competitors of the human interferon-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)**
2. "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 -)**
3. "Structural and-functional characteristic of human interferon-gamma and its recombinant antagonists", "**Bilateral program for integrated activities 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-)**
4. "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 hIFN γ 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. M. Tileva, 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. P. Leister, M. Tileva, 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