

Curriculum vitae

Ivan V. Zvyagin

Birthday: 10.08.1984.

Professional address:

Laboratory of Comparative and Functional Genomics, Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences (RAS).
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Education:

- Bachelor's degree, June 2005 - graduated from Nizhny Novgorod State University, Faculty of Biology, Dept. of Molecular Biology and Immunology, specialization in cell biology.
- Master's degree, July 2007 - graduated from Pushchino State University, Dept. Physical-Chemistry Biology and Biotechnology, specialization in Biochemistry and Molecular Biology.
- At present - PhD student at the Laboratory of Comparative and Functional Genomics, Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, RAS.

Career/Employment:

- 2004 Undergraduate student at the Laboratory of Gen-engineered preparations, D.I.Ivanovsky Institute of Virology, Russ. Acad. Med. Sci., Moscow.
- 2005-2007 Graduate student at the Laboratory of Protein Structure Organization, Branch of Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russ. Acad. Sci.
- 2007- present PhD student at the Laboratory of Comparative and Functional Genomics, Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russ. Acad. Sci.

Research activities:

Study of molecular mechanisms of some autoimmune diseases in particular ankylosing spondylitis. Development and study of different approaches to eliminate of pathogen T-cell subfamilies and clones. Properties and practical application of bioluminescent and fluorescent proteins.

Awards:

Moscow Government Awards which Supports Young Russian Scientists, 2007.

Laboratory skills:

- 1) Basic molecular biology skills: DNA isolation, PCR, oligonucleotides design and purification, molecular cloning, cDNA-library construction and analysis, agarose and PAAG electrophoresis.
- 2) Skills in working with proteins: recombinant proteins expression, chromatographic purification with ion-exchange, gel-filtration, affine, hydrophobic carriers using FPLC and HPLC techniques, ultra filtration, centrifugal separation in density gradient, finding of favorable conditions for refolding, functional analysis of protein fractions, analysis of absorbance and fluorescent spectra, ELISA, Western-blotting (Dot-blot, ECL), native and SDS-PAGE of proteins.
- 3) Some experience in phage display: biopanning of phage libraries, phage amplification and isolation, infection of bacteria cells with phage.
- 4) Experience in working with organisms: *E.coli*, mouse, rabbit, fd phage.
- 5) Computer skills: Windows 9x, XP, MS office, Adobe Photoshop, Corel Draw; programs for DNA/protein analysis and alignment (ClustalW, Bioedit, GeneRunner etc), genome and protein databases.

Teaching/Supervising Experiences:

Training undergraduate students.

Publications:

- 1) **Zvyagin I.V.**, Samarkina O.N., Chkalina A.V., Popova A.G., Lushnikov K.V., Voznyak M.V., Rudenko N.V., Vinokurov L.M. Development of immunoassay to aflatoxines B₁ and Ze analysis // abstract at the X school-conference of young scientists “Biology is the science of XXI century”, 17-26 April, 2006, Pushchino, pp. 370-371.
- 2) **Zvyagin I.V.**, Chkalina A.V., Rudenko N.V., Lebedev Yu.B., Vinokurov L.M. Bioluminescent immunoassay based on new conjugate of streptavidin and *Gaussia princeps* luciferase applied to aflatoxin B₁ analysis. // abstract at the XI international school-conference of young scientists “Biology is the science of XXI century”, 29 Oct – 2 Nov, 2007, Pushchino, pp. 202.
- 3) Popova A.G., Samarkina O.N., Gvozdik E.Yu., Rylova Yu.V., Chkalina A.V., **Zvyagin I.V.**, Lusta K.A., Gorokhovatsky A.Yu., Rudenko N.V., Vinokurov L.M. Expression and purification of GFP-like proteins, investigation those physical-chemistry and immunochemistry properties. // abstract at the XI international school-conference of young scientists “Biology is the science of XXI century”, 29 Oct – 2 Nov, 2007, Pushchino, pp. 214.
- 4) **Zvyagin I.V.**, Chkalina A.V., Rudenko N.V., Voznyak M.V., Lebedev Yu.B., Vinokurov L.M. New bioluminescent conjugate based on streptavidin and *Gaussia princeps* luciferase in application for detection of aflatoxin B₁. // abstract at the XX

winter international youth scientific school “Perspective Directions of Physical-Chemistry Biology and Biotechnology”, 11-15 February, 2008, Moscow, pp. 133.

References:

Dr. Yuri B. Lebedev

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