

Mikhail Khoretonenko

University of Nebraska-Lincoln
Department of Biological Sciences
E144 Beadle Center,
Lincoln, NE
Tel. (402) 472-59-06
e-mail: mkhoretonenko2@unlnotes.unl.edu

Education

Doctor of Philosophy, Biology, Institute of Poliomyelitis and Viral Encephalitides RAMS, Moscow, Russia (2005)
Master of Science, Chemistry, Moscow State University, Russia (2000)

Awards, Grants and Training

Russian Government Award for Post Graduate studies (2002)

Research Experience

University of Nebraska–Lincoln, Department of Biological Sciences, Nebraska Center for Virology, Asst. Prof. Luwen Zhang’ lab (February 2006-Present).

- investigation of IRF-7 inhibition by NS2B3 Dengue virus protein;
- evaluation of possible inhibition properties of NS2B3 Dengue virus protein against different immune regulatory factors.

University of Nebraska–Lincoln, Department of Biochemistry, Prof. Vadim N. Gladyshev’ lab (August 2005-February 2006).

- investigation of mechanism and targeting of methionine sulfoxide reductases;
- characterization of thioredoxin reductase 1 nuclear form.

Chumakov’ Institute of Poliomyelitis and Viral Encephalitides RAMS, Moscow, Russia (2001-2005)

- adaptation and development of new molecular methods of vaccine production control;
- studies in optimization of the vaccine against tick–borne encephalitis;
- development of the new approaches in the prophylactic preparations against tick–borne encephalitis
- studies in optimization of the vaccine against rabies

Department of Chemistry, Moscow State University, Moscow, Russia (1998-2000)

Investigation of *E. coli* RNA–polymerase–promoter complex using the synthetic oligonucleotides

Technical skills

- DNA/RNA purification.
- Transformation/plasmid purification techniques.
- Protein purification (immunoprecipitation, affinity chromatography, dialysis etc).
- Antibody purification.
- Protein-DNA/RNA crosslinking using the chemically modified oligonucleotides.
- ³²P and ¹⁴C - DNA labeling, protein metabolic labeling.

- RNase protection assay.
- Luciferase assay.
- Cell culture techniques.
- PCR and reverse transcription PCR.
- Lab mice: intramuscular, intraperitoneal, subcutaneous immunization, bleeding.
- Rabbits: intravenous, intramuscular, subcutaneous immunization, bleeding.
- Virus cultivation in cells.
- Advanced user of MS Office (Word, Excel, Access, Power point, Internet), Office 95–XP, ChemWin, ISISDraw, Blast, ClustalX, basic programming skills (Pascal).

References

- **Prof. Luwen Zhang**, PhD

Current employer

University of Nebraska–Lincoln, Department of Biological Sciences, Nebraska Center for Virology
E141, Beadle Center, 1901 Vine St., Lincoln, NE, 68588-0664

(402) 472-59-05

lzhang2@unlnotes.unl.edu

- **Andrey V. Timofeev**, MD, PhD, DSc

Engelhardt Institute of Molecular Biology, laboratory of chromatin structure and function

32 Vavilova st., Moscow 119991, Russia

+7 916 874 97 38

atimofeev@eimb.ru

- **Dmitry E. Fomenko**, PhD

University of Nebraska–Lincoln, Department of Biochemistry

N141, Beadle Center, 1901 Vine St., Lincoln, NE, 68588-0664

(402) 472-49-47

dfomenko@genomics.unl.edu

Papers

1. Rudakova E.A., Ivanovskaya M.G., Kozlov M.V., Khoretonenko M.V., Oretskaya T.S., Nikiforov V.G. 2000. Probing contacts of phosphate groups of oligonucleotides from the non-template strand of *lacUV5* promoter with *E. coli* RNA polymerase using regioselective crosslinking. *Biochemistry (Moscow)*, v. 65, № 6, p. 640-650. [\[Abstract\]](#)
2. Khoretonenko M.V., Vorovitch M.F., Zakharova L.G., Pashvykina G.V., Ovsyannikova N.V., Stephenson J.R., Timofeev A.V., Altstein A.D., Shneider A.M. 2003. Vaccinia Virus Recombinant Expressing Gene of Tick-borne Encephalitis Virus Non-structural NS1 Protein Elicits Protective Activity in Mice. *Immunology Letters*, v. 90, № 2-3, p.161-163. [\[Abstract\]](#)
3. Volpina O.M., Volkova T.D., Koroev D.O., Ivanov V.T., Ozherelkov S.V., Khoretonenko M.V., Vorovitch M.F., Stephenson J.R., Timofeev A.V. 2005. A synthetic peptide based on the NS1 non-

structural protein of tick-borne encephalitis virus induces a protective immune response against fatal encephalitis in an experimental animal model. *Virus Res.*, v. 112, № 1-2, p. 95-99. [\[Abstract\]](#)

4. Aleshin S.E., Timofeev A.V., Khoretonenko M.V., Zakharova L.G., Pashvykina G.V., Stephenson J.R., Shneider A.M., Altstein A.D. 2005. Combined prime-boost vaccination against tick-borne encephalitis (TBE) using a recombinant vaccinia virus and a bacterial plasmid both expressing TBE virus non-structural NS1 protein. *BMC Microbiol.* V. 5, p. 45. [\[Abstract\]](#)