

Yuri Y. Londer, Ph.D.

Education

1999 – Ph.D. (Biochemistry). Bach Institute of Biochemistry of Russian Academy of Sciences, Moscow, Russia

1993 – M.S. (Chemistry). Lomonosov Moscow State University, Department of Chemistry, Moscow, Russia

Research experience

December 2002 – present Assistant Scientist, Argonne National Laboratory, Biosciences Division, Argonne, Illinois.

May 1999 – November 2002 Postdoctoral Appointee, Argonne National Laboratory, Biosciences Division, Argonne, Illinois.

1995-1999 Graduate student, Bach Institute of Biochemistry, Laboratory of Molecular Genetics, Moscow, Russia

1994-1995 Junior Research Fellow, Bach Institute of Biochemistry, Laboratory of Molecular Genetics, Moscow, Russia

1993-1994 Intern, Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Laboratory of Gene Chemistry, Moscow, Russia

1992-1993 Diploma Student, Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Laboratory of Gene Chemistry, Moscow, Russia

Professional membership

Member of The Protein Society

Publications

1. Y.Y. Londer, V.V. Mesyanzhinov. (1999) Thermostability of bacteriophage T4 fibritin and its deletional mutants. *Bioorganicheskaya khimiya*. V. 25, p. 257-263.
2. Y.Y. Londer, S.P. Boudko, V.V. Mesyanzhinov. (1999) Superhelical proteins: structure and functions [review]. *Uspekhi Biol. Khim.* V. 39, p. 45-76.
3. A.V. Letarov, Y.Y. Londer, S.P. Boudko, V.V. Mesyanzhinov. (1999) The carboxy-terminal domain initiates trimerization of bacteriophage T4 fibritin. *Biochemistry (Moscow)*. V. 64, p. 817-823.
4. S.P. Boudko, Y.Y. Londer, A.V. Letarov, N.V. Sernova, J. Engel, V.V. Mesyanzhinov. (2002) Domain organization, folding and stability of bacteriophage T4 fibritin, a segmented coiled-coil protein. *Eur. J. Biochem.* V. 269, p. 833-841.
5. Y.Y. Londer, P.R. Pokkuluri, D.M. Tiede, M. Schiffer. (2002) Production and preliminary characterization of a recombinant triheme cytochrome c₇ from *Geobacter sulfurreducens* in *Escherichia coli*. *Biochim. Biophys. Acta (Bioenergetics)*. V. 1554, p. 202-211.

6. P.R. Pokkuluri, Y.Y. Londer, N.E.C. Duke, W.C. Long, M. Schiffer. (2004) Family of cytochrome *c*₇-type proteins from *Geobacter sulfurreducens*: the structure of one cytochrome *c*₇ at 1.45 Å resolution. *Biochemistry*. V. 43, p. 849-859.
7. P.R. Pokkuluri, Y.Y. Londer, N.E.C. Duke, J. Erickson, M. Pessanha, C.A. Salgueiro, M. Schiffer. (2004) Structure of a novel *c*₇-type three-heme cytochrome domain from a multidomain cytochrome *c* polymer. *Protein Sci.* V. 13, p. 1684-1692.
8. M. Pessanha, Y.Y. Londer, W.C. Long, J. Erickson, P.R. Pokkuluri, M. Schiffer, C.A. Salgueiro. (2004) Redox characterization of *Geobacter sulfurreducens* cytochrome *c*₇: physiological relevance of the conserved residue F15 probed by site-specific mutagenesis. *Biochemistry*. V. 43, p. 9909-9917.
9. Y.Y. Londer, P.R. Pokkuluri, M. Schiffer. (2004) Functional expression of multiheme cytochromes *c* in *E. coli*. *PharmaGenomics*. V. 4, p. 24-30.
10. Y.Y. Londer, P.R. Pokkuluri, J. Erickson, V. Orshonsky, and M. Schiffer. (2005). Heterologous expression of hexaheme fragments of a multidomain cytochrome from *Geobacter sulfurreducens* representing a novel class of cytochromes *c*. *Protein Expr. Purif.* V. 39, p. 254-260.
11. K.M. Kemner, S.D. Kelly, E.J. O'Loughlin, T. Khare, L.A. Moe, B.G. Fox, M.I. Donnelly, Y. Londer, M. Schiffer and C.S. Giometti (2005) XRF and XAFS analysis of electrophoretically isolated nondenatured proteins. *Physica Scripta*. V. T115, p. 940-942.

Selected presentations

Y.Y. Londer, A.V. Letarov, S.P. Boudko, M.M. Shneider, V.V. Mesyanzhinov. Analysis of the folding pathway for the bacteriophage T4 fibrin. Virus Assembly (FASEB Summer Research Conference). Saxtons River, VT, USA, July 4-9, 1998. Poster.

Y.Y. Londer, A.V. Letarov, V.V. Mesyanzhinov. Circular permutation of trimeric fibrous protein is *tsf*-mutation. 9th European Student Conference of the Charite. Berlin, Germany, October 21-24, 1998. Poster.

Y.Y. Londer, M. Schiffer. Expression of a three-heme cytochrome from *Geobacter sulfurreducens* in *Escherichia coli*. 15th Symposium of the Protein Society. Philadelphia, PA, USA, July 28-August 1, 2001. Poster.

Y.Y. Londer, P.R. Pokkuluri, W.C. Long, M. Schiffer. Cloning, expression, purification and initial characterization of a three-heme cytochrome from *Geobacter sulfurreducens*. 9th DOE Genome Contractor and Grantee Workshop. Oakland, CA, USA, January 27-31, 2002. Poster.

Y.Y. Londer, P.R. Pokkuluri, J.E. Erickson, N. Duke, M. Schiffer. "Nanowire" polymeric cytochromes *c* consisting of *c₇*-type domains: putative new class. 17th Symposium of the Protein Society. Boston, MA, USA, July 26-30, 2003. Poster.

Y.Y. Londer, P.R. Pokkuluri, W.C. Long, J.E. Erickson, M. Schiffer. Developing a periplasmic expression system in *E. coli* and implementing it for overproduction of multiheme cytochromes *c*. The Protein Information Week. San Diego, CA, USA, January 12-15, 2004. Oral presentation.

Y.Y. Londer, P.R. Pokkuluri, F.R. Collart, M. Schiffer. Development of an expression system in *E. coli* for overproduction and proper post-translational modification of multiheme cytochromes *c*. AIChE Annual Meeting. Austin, TX, USA, November 7-12, 2004. Oral presentation.

Y.Y. Londer and F.R. Collart. A novel method for plate-based detection of cytochromes *c* and its application to high-throughput production of cytochromes *c* from *Shewanella oneidensis*. 19th Symposium of the Protein Society. Boston, MA, USA, July 30-August 3, 2005. Poster.

Y.Y. Londer, P.R. Pokkuluri, L. Orshonsky, V. Orshonsky, Y. Zagynsky, M. Schiffer. Cloning, purification and structures of multiheme multidomain cytochromes *c* from *Geobacter sulfurreducens* representing a novel class of cytochromes. 19th Symposium of the Protein Society. Boston, MA, USA, July 30-August 3, 2005. Poster.