

CURRICULUM VITAE

Yury V. Ivanov

Ph.D. candidate

Department of Biological Sciences,
Bowling Green State University,
Bowling Green, OH-43403, USA

Contact Info

Tel. #: 1(419)378-0360

E-mail: yivanov@bgsu.edu

Web-site: <http://personal.bgsu.edu/~yivanov/>

Education

- 2008- 2011 CER. "Bioinformatics: Proteomics/Genomics", Concurrent graduate certificate program at Bowling Green State University, Department of Biological Sciences, USA in collaboration with University of Toledo, Medical College, Bioinformatics Department.
- 2007- present Ph.D. Biological Sciences, Bowling Green State University, USA.
- 2002-2007 Specialist degree (B.S and M.S. combined) in Chemistry (Radiochemistry major), Saint-Petersburg State University, Russia.
- 1992-2002 Lyceum #533, Chemistry and Biology (second language: English), Saint-Petersburg, Russia.

Positions Held

- Graduate Student Senator, GSS, Bowling Green State University, 2010 – 2011;
Graduate Teaching Assistant, BIOL 2050, Concepts in Biology II (4 units), 2007 – 2011

Research Interests

1. Bacterial transport systems of nutrients
2. Phage genetics, morphology, evolution
3. Bioinformatics (genomics/proteomics)
4. Protein biochemistry
5. Chemotherapeutics and phage therapy research
6. Radiochemistry in biological systems

Research Experience

Summer 2008 – Fall 2011:

Doctoral Thesis “The roles of moron genes in the *Escherichia coli* enterobacteria phage $\phi 80$ ”, Department of Biological Sciences, Bowling Green State University, USA.

Experience gained: culture and maintenance of tailed bacteriophages from *Siphoviridae* family and *E. coli* K-12 strain W3110 bacteria; extraction and purification of DNA and proteins; PCR cloning, mutagenesis, and labeling techniques; SDS-PAGE and Western Blotting; radiolabeled iron transport in bacteria; bacteriophage and *E. coli* visualization utilizing TEM, SEM, and AFM microscopy; application of bioinformatics techniques to study prokaryotic and viral genomes.

Fall 2005 – Spring 2007:

Specialist degree thesis “*L* α X-ray emission spectra and chemical environments of Rare Earths in some selected compounds”, Saint-Petersburg State University, Department of Chemistry, Russia.

Experience gained: X-ray spectroscopy and radioactive materials; quantitative and qualitative analysis of Rare Earths-containing solid compounds using various statistical approaches; fundamental understanding of the atomic structure; identification of oxidative states of ^{238}U in various uranium compounds.

Winter 2005 – Spring 2005:

Undergraduate Research Assistant, “Heterogeneous catalysis in organic chemistry”, Saint-Petersburg State University, Department of Chemistry, Russia

Experience gained: organic laboratory techniques; literature review of the heterogeneous catalysis in organic chemistry.

Fall 2003 – Spring 2004:

Undergraduate Research Assistant, “Processes in membranes: Mass transfer”, Saint-Petersburg State University, Department of Chemistry, Russia

Experience gained: Literature review of mass transfer in membranes focusing on baromembrane processes.

Winter 2002 – Spring 2003:

Undergraduate Research Assistant, “Research study of compression isotherms of stearic acid on the water sub-phase”, Saint-Petersburg State University, Department of Chemistry, Russia

Experience gained: colloid solutions; preparing monolayer films of stearic acid on glass surfaces; measuring the diameter of stearic acid polar heads (carboxyl groups) using compression isotherms.

Professional Societies

“American Society for Microbiology” (ASM), USA, January 2011 – present;

“Golden Key International Honour Society”, USA, November 2010 – present;

“Mendeleev’s Science Society”, Saint-Petersburg, Russia, June 2002 – present.

Professional skills:

- ❖ Genomics: PCR techniques, DNA Extraction and Purification techniques, Mutagenesis techniques, Transformation, and Molecular Cloning.
- ❖ Microbiology: Culture and maintenance of lambda-like bacteriophages and *E. coli* K-12 bacteria; phage and colicin spot-titer assays; Radiolabeled iron transport in bacteria.
- ❖ Biochemistry: SDS-PAGE and Western Blotting; Protein labeling, extraction, and purification.
- ❖ Chemistry: General Radiometry; Anion exchange chromatography; Alpha-, Gamma-, and X-ray Spectroscopy; and various physico-chemical methods of analysis; organic chemistry, radiochemistry, electrochemistry, colloid chemistry, and analytical chemistry laboratory experiences.
- ❖ Bioinformatics: genomics/proteomics techniques: computational analysis of microarray data; visualization of crystal structures of proteins using PyMol software; Artemis (Genome Browser); Mauve Genome Alignment Software; phylogenetic analysis (NJplot, PAUP), Clustal, various Bioconductor packages for R software.
- ❖ Microscopy: Transmission Electron Microscopy (TEM); Scanning Electron Microscopy (SEM); Atomic Force Microscopy (AFM).
- ❖ Computer skills: Perl; R; UNIX (Linux); HTML; Photoshop.
- ❖ Languages: bi-lingual (English and Russian)