Dr. **PETR V. NAZAROV**

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DATE AND PLACE OF BIRTH:

1st January 1978
Minsk, Belarus (former part of USSR)

EDUCATION:

2002 – 2006
Laboratory of Biophysics***, Wageningen University,*** The Netherlands and
Department of Systems Analysis***, Belarusian State University***, Belarus
PhD sandwich-system program (**Promoted as PhD at 13.12.2006, Wageningen**)
"Simulation and analysis of FRET in the study of membrane proteins" (PhD Thesis)

2000 – 2001
Department of Systems Analysis, ***Belarusian State University***
Master of Science program "Development of methods, algorithms and software tools of optical spectra processing by neural networks" (Master Thesis)

1995 – 2000
Department of Systems Analysis, Faculty of Radio Physics and Electronics, ***Belarusian State University***
Undergraduate program "Development of methods, algorithms and software tools of atomic emission spectra processing" (Diploma Thesis)

LANGUAGES:

Belarusian, English, Polish, Russian

SCIENTIFIC & PRACTICAL INTERESTS:

- Statistical methods of microarray data analysis
- Scientific software development (C++, MATLAB, R)
- Modeling and analysis of complex biomolecular systems (actin polymerization and cell regulation networks)
- Stochastic simulation of biomolecular processes (stochastic discrete-event simulation algorithms)
- Artificial neural networks and their applications (approximation, data analysis)

WORK EXPERIENCE:

2007-present – biostatistician at CRP-Sante, Luxembourg

2007 – senior tutor at Belarusian State University, Belarus

2006-2007 – engineer-programmer at Belarusian State University, Belarus

2002-2006 – PhD-student at Belarusian State University, Belarus, and Wageningen University, The Netherlands.

PEDAGOGIC EXPERIENCE:

- Lecture course "*Business Statistics*" (lectures: 42 hr) read in English for MBA students of Belarusian State University, Minsk, Belarus. (2006/2007, 2007/2008)
- Lecture course "*Systems Analysis and Modeling*", (lectures: 40 hr, practical: 28 hr), read in English for students of Belarusian State University, (2007/2008).
- Scientific supervision of students theses (2006/2007, 2007/2008)
- Participation with lectures in the courses "*Neural networks*", "*Modeling of processes and systems*", and "*Mathematical modeling*" for the students of the Department of Systems Analysis, Belarusian State University, Minsk, Belarus.

RESEARCH EXPERIENCE (PROJECTS):

2006 – 2007 ***Senior researcher and project manager***

- "*Developing mathematical models, algorithms and programming tools for analysis of actin-based motility*" (**funded by Fonds National de la Recherche Luxembourg**), CRP-Sante, Luxemburg, and Belarusian State University.
- *"Simulation and global analysis of the processes of electronic excitation in complex molecular systems"* (funded by Belarusian National Fund of Fundamental Research), Belarusian State University.

2000 – 2005 ***Researcher and supervisor of the projects in relation to PhD topic***

PUBLICATIONS:

28 scientific papers, including:
10 journal articles
18 papers in proceedings of international conferences

Key publications in the last 5 years:

1. Nazarov P.V., Koehorst R.B.M., Vos W.L, Apanasovich V.V., Hemminga M.A. *FRET study of membrane proteins: determination of the tilt and orientation of the N-terminal domain of M13 major coat protein*, Biophys. J., **2007**, 92, p. 1296-1305.
2. Vos W.L, Schor M., Nazarov P.V., Koehorst R.B.M., Hemminga M.A. *Structure of membrane-embedded M13 major coat protein is insensitive to hydrophobic stress*, Biophys. J., **2007**, v. 93, p. 3541-3547.
3. Nazarov P.V. *Simulation and analysis of FRET in the study of membrane proteins*, Doctoral Thesis, ISBN: 90-8504-553-3, PrinterPartners Ipskamp, Wageningen, **2006**, 135 pages.
4. Nazarov P.V., Koehorst R.B.M., Vos W.L, Apanasovich V.V., Hemminga M.A. *FRET study of membrane proteins: simulation-based fitting for analysis of membrane protein embedment and association*, Biophys. J., **2006**, 91, p. 454-466.
5. Hesselink R.W., Koehorst R.B.M., Nazarov P.V., Hemminga M.A. *Membrane-bound peptides mimicking transmembrane Vph1p helix 7 of yeast V-ATPase: A spectroscopic and polarity mismatch study.* Biochim. et Biophys. Acta, **2005**, 1716:2, p. 137-145.
6. Sparr E., Ash W.L., Nazarov P.V., Rijkers D.T.S., Hemminga M.A., Tieleman D.P., Killian J.A. *Self-association of transmembrane a-helices in model membranes: importance of helix orientation and role of hydrophobic mismatch.* J. Biol. Chem., **2005**, 280:47, p. 39324-39331.
7. Nazarov P.V., Apanasovich V.V., Lutkovski V.M., Yatskou M.M., Koehorst R.B.M., Hemminga M.A. *Artificial neural network modification of simulation-based fitting: application to a protein-lipid system.* J. Chem. Inf. Comput. Sci., **2004**, 44, p. 568-574.

Signature:  / P. Nazarov /

Date: 12/03/2008