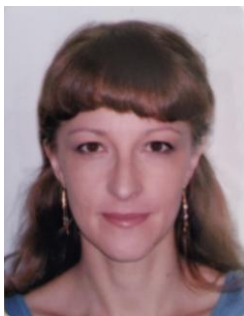


EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION

Name **Kukushkina (Naletova) Irina**
Address via Pizzo Maugeri 2A, 95028 Valverde (CT) Italy
Telephone +393489668596
Fax -
E-mail irina_naletova@yahoo.com

Nationality Italian, Russian

Date of birth 08/03/1980

WORK EXPERIENCE

- Date **2016 – 2018**
• Name and address of employer Department of Chemical Science, University of Catania
• Position held Temporary Research Fellow (executor of Gant (CHIM/03))

- Date **2012 – 2016**
• Name and address of employer Department of Chemical Science, University of Catania
• Position held Temporary Research Fellow (executor of Gants: FIRB-MERIT RBNE08HWLZ_001 (BIO/10), PON01_01078 (BIO/10), PON02_00607_3421644 (CIRCMSB))

- Date **2006 – 2012**
• Name and address of employer Laboratory of Animal Cell Biochemistry of Lomonosov Moscow State University
• Position held Research Fellow

EDUCATION AND TRAINING

- Date **2003 – 2006**
• Name and type of organisation providing education and training Laboratory of Animal Cell Biochemistry of Lomonosov Moscow State University

Title of the PhD: The influence of chaperonin GroEL and amyloid beta-peptide(1-42) on the denaturation and renaturation of glyceraldehyde-3-phosphate dehydrogenase

• Title of qualification awarded PhD

- Date **1997 – 2002**
• Name and type of organisation providing education and training Department of Bioorganic Chemistry, School of Biology of Lomonosov Moscow State University

Title of Master Thesis: Influence of the biologically active peptides Taftsin and Selank on the whole blood properties.

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE

Russian

OTHER LANGUAGES

English

• Reading skills

Excellent

• Writing skills

Excellent

• Verbal skills

Excellent

Italian

• Reading skills

Good

• Writing skills

Basic

• Verbal skills

Good

TECHNICAL SKILLS AND COMPETENCES

Proteins purification: ammonium sulfate precipitation, dialysis, column chromatography;

Protein characterization assays: SH-groups determination/modification; oxidation of proteins, UV-Vis spectroscopy; methods of enzymology (measurement of enzymatic activity, inhibitory analysis), protein immobilization technique, biophysical analytical methods;

Protein techniques of immunochemistry: ELISA;

Biochemical assays: SDS PAGE, Native and Native Blue Electrophoresis; Western Blotting;

Cell culture: cytotoxicity assays (MTT, LDH release), proliferation assays (BrdU, Hoechst), wound healing, internalization of cell membrane proteins, total and mitochondrial reactive oxygen species (ROS) assays, glutathione in-cell level and redox state determination;

microbiological skills;

TEACHING EXPERIENCE

• Date

2018

• Name and type of organization providing education and training

Department of Chemical Science, CdLM in Biomolecular Chemistry, University of Catania

Co-supervision of 2 Master degree thesis: Perracchio A. – “Peptidomimetics: neurotrophic role of ACTH(4-10); Surdo A. – “Neuroprotective effects of NGF”.

• Date

2017-2018

• Name and type of organization providing education and training

Department of Chemical Science, CdLM in Biomolecular Chemistry, University of Catania

Integration lessons to support the course of “Physical Chemistry of Biointerfaces”

• Date

2016 – 2018

• Name and type of organization providing education and training

Subject expert (Cultore di Materia) Medicine Faculty (CdLM in Medicine and Surgery) BIO/10

• Date

2008 – 2009

• Name and type of organization providing education and training

School of Bioengineering and Bioinformatics, Lomonosov Moscow State University

Practical course "General Biochemistry"

• Date

2006 – 2009

• Name and type of organization providing education and training

School of Bioengineering and Bioinformatics, Lomonosov Moscow State University

Supervision of 3 Course papers and 3 Master degrees work in School of Bioengineering and Bioinformatics. Titles of 3 Master theses: Fedyunin I. – "Some glycolytic enzymes as substrates of chaperonin TRiC. New method of TRiC extraction and investigations of thermodynamical parameters of the chaperonin"; Kisselev G. – "Effect of the chaperonin GroEL on the aggregation of two ovine prion protein allelic variants VRQ and ARR"; Popova K. – "Extraction of chaperonin TRiC and search for its novel substrates".

PERSONAL GRANTS

• Date

2008 – 2010 (24 months)

• Name and type of organization

Personal Grant by RFBR (08-08-00540-a). Title: "Protein-based biodetectors for determination of amyloidal structures and oxidants".

• Date

2008 – 2009 (12 months)

• Name and type of organization

Grant of the President of Russian Federation for young scientists (MC-467.2008.4). Title: "Investigation of the role of glyceraldehyde-3-phosphate dehydrogenase and chaperone system in the development of neurodegenerative disorders".

• Date

2005, 2007, 2008, 2009

• Name and type of organization

Youth Travel Grant from EMBO-FEBS and FEBS

AWARDS AND HONORS

• Date

2007, 2008

A.D. Kaulen award for young scientists

• Date

2007, 2008, 2010

Lomonosov Moscow State University award for young teachers and scientists

• Date

2007

Lomonosov Moscow State University grant for talented students, PhD students and young scientists

INTERNATIONAL CONFERENCE

(oral presentations)

• Date

2018, 16-17 February XVII workshop on Pharmacobiometallics (Biomet2018)

• Title

"Metal signaling and BDNF expression"

• Date

2015, 23-24 October XV workshop on Pharmacobiometallics (Biomet2015)

• Title

"Copper complexes affect metallostasis of tumor cells."

• Date

2009, 23-28 May EMBO-FEBS Workshop on "Biology of Molecular Chaperones. Cellular Protein Homeostasis in disease and Ageing"

PUBLICATIONS

1. **Naletova I**, Satriano C, Pietropaolo A, Gianì F, Pandini G, Triaca V, Amadoro G, Latina V, Calissano P, Travaglia A, Nicoletti VG, La Mendola D, Rizzarelli E. The copper(II)-assisted connection between NGF and BDNF by means of nerve growth factor-mimicking short peptides. *Cells*. 2019, 8(4). pii: E301.
2. Cucci LM, **Naletova I**, Consiglio G, Satriano C. A hybrid nanoplatform of graphene oxide/nanogold for plasmonic sensing and cellular applications at the nanobiointerface. *Applied Sciences*. 2019, 9, 676.
3. **Naletova I**, Satriano C, Curci A, Margiotta N, Natile G, Arena G, La Mendola D, Nicoletti VG, Rizzarelli E. Cytotoxic phenanthroline derivatives alter metallostasis and redox homeostasis in neuroblastoma cells. *Oncotarget*. 2018, 9(91): 36289-36316.
4. Cucci LM, Munzone A, **Naletova I**, Magrì A, La Mendola D, Satriano C. Gold nanoparticles functionalized with angiogenin-mimicking peptides modulate cell membrane interactions. *Biointerphases*. 2018, 13(3): 03C401
5. Magrì A, Tabbì G, Giuffrida A, Pappalardo G, Satriano C, **Naletova I**, Nicoletti VG, Attanasio F. Influence of the N-terminus acetylation of Semax, a synthetic analog of ACTH(4-10), on copper(II) and zinc(II) coordination and biological properties. *Journal of Inorganic Biochemistry*, 2016, 164: 59-69.
6. **Naletova I.**, Nicoletti V.G., Milardi D., Pietropaolo A., Grasso G. Copper, differently from zinc, affects the conformation, oligomerization state and activity of bradykinin. *Metallomics*. 2016, 8(8): 750-761
7. Sinopoli A., Giuffrida A., Tomasello M.F., Giuffrida M.L., Leone M., Attanasio F., Caraci F., De Bona P., **Naletova I.**, Saviano M., Copani A., Pappalardo G., Rizzarelli E. Influence of the N-terminus acetylation of Semax, a synthetic analog of ACTH(4-10), on copper(II) and zinc(II) coordination and biological properties. *Journal Inorganic Biochemistry*, 2016, 164: 59-69
8. Motta C., D'Angeli F., Scalia M., Satriano C., Barbagallo D., **Naletova I.**, Anfuso C. D., Lupo G., Spina-Purrello V.. PJ-34 inhibits PARP-1 expression and ERK phosphorylation in glioma-conditioned brain microvascular endothelial cells, *European Journal of Pharmacology*, 2015, 761: 55–64
9. Tabbì G., Magrì A., Giuffrida A., Lanza V., Pappalardo G., **Naletova I.**, Nicoletti V.G., Attanasio F., Rizzarelli E. Semax, an ACTH4-10 peptide analog with high affinity for copper(II) ion and protective ability against metal induced cell toxicity, *Journal of Inorganic Biochemistry*, 2015, 142 : 39–46
10. Attanasio F., **Naletova I.**, Muronetz V., Giuffrida A., Giuffrida M. L., Tomasello F. M., Caraci F., Copani A., Pappalardo G., Rizzarelli E. (2012). Trehalose conjugated β -sheet breaker peptides as stabilizers of A β monomers. In: Kokatos G, Constantinou-Kokotou V, Matsoucas J. *Proceeding of 32 European Peptides Symposium : Peptides 2012*, p. 402-403, ISBN: 978-960-466-121-3, Athens, 2-7 September 2012
11. **Naletova I.** N., Popova K. M., Eldarov M. A., Kuravsky M. L., Schmalhausen E. V., Sevostyanova I. A., Muronetz V. I. Chaperonin TRiC assists the refolding of sperm-specific glyceraldehyde-3-phosphate dehydrogenase. *Archives of Biochemistry and Biophysics*, 2011, 516: 75-83
12. Kisselev G.G., **Naletova I.N.**, Sheval E. V., Stroylova Y. Y., Schmalhausen E. V., Muronetz V. I. Chaperonins induce an amyloid-like transformation of ovine prion protein: The fundamental difference in action between eukaryotic TRiC and bacterial GroEL. *Biochimica et Biophysica Acta*, 2011, 1814(12): 1730-1738
13. Amarantov C.V., **Naletova I.N.**, Kurochkina L.P. Determination of the shape of chaperonin molecules based on Small Angle X-ray Scattering

- (SAXS) curves using toroid formfactor. *Journal of Experimental and Theoretical Physics*, 2011, 113, (2): 322–38
14. Eronina T.B., Chebotareva N.A., Bazhina S.G., **Naletova I.N.**, Muronetz V.I., Kleymenov S.Yu., Kurganov B.I. Effect of GroEL on thermal aggregation of glycogen phosphorylase b from rabbit skeletal muscle. *Macromol Biosci.* 2010, 10(7):768-74
 15. Markossian K.A., Golub N.V., Chebotareva N.A., Asryants R.A., **Naletova I.N.**, Muronetz V.I., Muranov K.O., Kurganov B.I. Comparative analysis of the effects of alpha-crystallin and GroEL on the kinetics of thermal aggregation of rabbit muscle glyceraldehyde-3-phosphate dehydrogenase. *Protein J.* 2010, 29(1):11-25
 16. Kisselev G., **Naletova I.**, Tsirolnikov K., Haertle T., Muronetz V. Interaction between prion proteins and molecular chaperones by the example of ovine prion proteins VRQ and ARR, and chaperonin GroEL. *Kinetics and Thermodynamics for Chemistry and Biochemistry. Vol 2.* Nova Science Publishers, Inc., New York, USA. 2009, 59-74
 17. Yazykova M.Yu., Schmalhausen E.V., **Naletova I.N.**, Pleten A.P., Muronetz V.I. Study of interactions of different forms of glyceraldehyde-3-phosphate dehydrogenase with chaperonin Hsp70. *Vestnik of Samara State University.* 2009, 6(72), 215-223
 18. **Naletova I.**, Schmalhausen E., Kharitonov A., Katrukha A., Saso L., Caprioli A., Muronetz V. Non-native glyceraldehyde-3-phosphate dehydrogenase can be an intrinsic component of amyloid structures. *Biochimica et Biophysica Acta.* 2008, 1784(12):2052-2058.
 19. Muronetz V., Pleten A., Schmalhausen E., **Naletova I.**, Haertle T. Pathogenic protein nanostructures while neurodegenerative disorders: identification and new approaches for their destruction. *Proceeding of International seminar on "Biotechnology and health-2"*, Armenia, Erevan. 2008, 76-82.
 20. Shalova I.N., **Naletova I.N.**, Saso L., Muronetz V.I., Izumrudov V.A. Interaction of polyelectrolytes with proteins, 3a Influence of complexing polycations on the thermoaggregation of oligomeric enzyme. *Macromol Biosci.* 2007, 7(7):929-939.
 21. **Naletova I.N.**, Schmalhausen E.V., Shalova I.N., Pleten A.P., Tsirolnikov K., Haertle T., Muronetz V.I. The non-functioning chaperonin GroEL stimulates protein aggregation. *Biomed Khim.Russian.* 2006, 52(5):518-524.
 22. **Naletova I.N.**, Muronetz V.I., Schmalhausen E.V. Unfolded, oxidized, and thermoinactivated forms of glyceraldehyde-3-phosphate dehydrogenase interact with the chaperonin GroEL in different ways. *Biochimica et Biophysica Acta.* 2006, 1764(4):831-838.
 23. Markossian K.A., Kurganov B.I., Levitsky D.I., Khanova H.A., Chebotareva N.A., Samoilov A.M., Eronina T.B., Fedurkina N.V., Mitskevich L.G., Merem'yanin A.V., Kleymenov S.Yu., Makeeva V.F., Muronetz V.I., **Naletova I.N.**, Shalova I.N., Asryants R.A., Shmalhausen E.V., Saso L., Panyukov Yu.V., Dobrov E.N., Yudin I.K., Timofeeva A.C., Muranov K.O. and Ostrovsky M.A. Mechanism of the chaperone-like activity. *Protein Folding: New Research.* Nova Science Publishers, Inc., New York, USA. 2006, 89-173
 24. Muronetz V.I., Schmalhausen E.V., Poliakova O.V., Naletova I.N., Shalova I.N., Saso L. Amyloidoses and oxidative stress. *Proceeding of International seminar on "Biotechnology and health"*, Armenia, Erevan. 2005, 55-62