

PERSONAL INFORMATION

Nadezda (Nadezhda) Zhdanovskaya

JOB APPLIED FOR POSITION PREFERRED JOB STUDIES APPLIED FOR PERSONAL STATEMENT

Post-doctoral research fellowship (Assegno di ricerca)

WORK EXPERIENCE

2020-by now

Fellowship for research activity for the project "Ruolo di Notch nelle patologie oncologiche" ("The role of Notch in cancer")

Sapienza University of Rome, Department of Molecular Medicine

- evaluation of biological effects of curcumin-derived Notch inhibitors in T-cell acute lymphoblastic leukemia (In collaboration with the Department of Chemistry and Technology of Drugs, Sapienza University of Rome and the Department of Pharmaceutical Sciences of Amedeo Avogadro University of Eastern Piedmont);
- assessment of combined administration of chalcone-derived Notch inhibitors and common cytostatic agents in in vitro models of T-cell acute lymphoblastic leukemia;

2019 - 20

Fellowship for research activity for the project "Interazione proteina Notch-molecole organiche" ("Interaction between Notch protein and organic molecules")
Sapienza University of Rome, Department of Physics

 evaluation of biological effects of chalcone- and curcumin-derived Notch inhibitors in T-cell acute lymphoblastic leukemia (In collaboration with the Department of Chemistry and Technology of Drugs, Sapienza University of Rome and the Department of Pharmaceutical Sciences of Amedeo Avogadro University of Eastern Piedmont);

2015 – 19 Research activity within the Ph.D. degree program in Molecular Medicine

Sapienza University of Rome, Department of Molecular Medicine

- screening and optimization of novel Notch inhibitors in T-cell acute lymphoblastic leukemia (In collaboration with the Department of Chemistry and Technology of Drugs, Sapienza University of Rome, and Instituto de Química Médica-CSIC, Madrid (Spain));
- epigenetic regulation of Notch signaling, expression and activity in cancer;
- identification and isolation of long non-coding RNAs in T-cell acute lymphoblastic leukemia cell models;

2012 – 15 Research activity within the specialist degree program in Medicine

Moscow State University, Faculty of Fundamental Medicine, Department of Biological and Medical Chemistry

evaluation of the role of reactive oxygen species in PI3K/Akt /mTOR pathway in fibroblasts.

EDUCATION AND TRAINING

October 2020

Membership of the Italian Guild of Medical Doctors (Iscrizione all'Ordine Provinciale di Roma dei Medici Chirurghi e degli Odontoiatri)

OMCEO Reference number 67047 (Iscrizione in data 01/10/2020 con numero 67047)

May-July 2020

Qualifying state examination for the Italian Guild of Medical Doctors (Abilitazione alla professione di Medico Chirurgo)

2019-2020

Sapienza University of Rome, Faculty of Medicine and Pharmacy, Medicine and Surgery Degree Course D , grade 110 with honors/110

• Master's thesis: "Identificazione di nuovi inibitori del signaling di Notch di origine naturale per il trattamento della leucemia linfoblastica a cellule T"

Master's degree in Medicine



2015-19 Ph.D. Degree in Molecular Medicine

Sapienza University of Rome, Department of Molecular Medicine

- Doctorate thesis: "Identification of novel chalcone inhibitors of Notch signaling"

2009-15 Specialist Degree in Medicine

Moscow State University, Faculty of Fundamental Medicine, Department of Biological and Medical Chemistry

- Undergraduate thesis: "H2O2 activates Akt/PKB in 3T3 NIH fibroblasts"
- Graduate thesis: "Reactive oxygen species are involved in PDGF receptor signaling in fibroblasts"

PERSONAL SKILLS

Mother tongue(s)

Russian

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1
C1	C1	C1	C1	C1

English Italian

Communication skills

 Good communication skills gained through the working experience in international laboratory environment

Job-related skills

- Cell culturing techniques (various cancer cell lines and primary cultures, fibroblast and adipocyte cell lines, human adipose derived stem cells, HEK, HaCaT,);
- Transfection and infection of cells (electroporation, lipofectamine, calcium phosphate transfection, nucleofection, lentivirus infection);
- Extraction of DNA (genomic or episomal) and RNA from cells and tissues, PCR, RT-PCR, qPCR, Northern blot;
- Cloning techniques and sample preparation for sequencing;
- Sample preparation for FACS analysis (cell cycle analysis, apoptosis evaluation, ROS detection), and fluorescent and confocal microscopy, time-lapse phase contrast microscopy, scratch test assay;
- Cytotoxicity and cell viability assays (MTS, MTT), IC50 determination;
- Drug combinations analysis;
- SDS/PAGE-electrophoresis and immunoblotting of proteins;
- ChIP assay;
- Luciferase reporter assay;
- Manipulation and genotyping of mice, intraperitoneal injections, tissue dissection and organ extraction; isolation of cells from human and murine blood samples;

Computer skills

- good command of Microsoft Office™ tools
- good user of EndNote and Mendeley
- good user of EMBL ImageG
- very good user of Photoshop
- good user of GraphPad
- good user of R (for needs of statistics)

ADDITIONAL INFORMATION



Publications

Quaglio D*, **Zhdanovskaya N***, Tobajas G, Cuartas V, Balducci S, Christodoulou M, Palermo R, Fabrizi G, Gargantilla M, Priego EM, Carmona Pestaña A, Passarella D, Screpanti I, Botta B, Mori M, Ghirga F, Perez-Perez MJ *Chalcones and chalcone-mimetic derivatives as Notch inhibitors in an in vitro model of T-cell acute lymphoblastic leukemia ACS Med Chem Lett.*

*These authors contributed equally to this work

Tottone L*, **Zhdanovskaya N***, Carmona Pestaña A, Zampieri M, Simeoni F, Lazzari S, Ruocco V, Pelullo M, Caiafa P, Felli MP, Checquolo S, Bellavia D, Talora C, Screpanti I, Palermo R *Histone modifications drive aberrant Notch3 expression/activity and growth in T-ALL Front Oncol.**These authors contributed equally to this work

Palermo R, Ghirga F, Piccioni MG., Bernardi F, **Zhdanovskaya N**, Infante P, Mori M *Natural products inspired modulators of cancer stem cells-specific signaling pathways Notch and Hedgehog Curr.* Pharm. Des. 2019 Jan 11; 25:1. doi: 10.2174/1381612825666190111124822.

Mori M, Tottone L, Quaglio D, **Zhdanovskaya N**, Ingallina C, Fusto M, Ghirga F, Peruzzi G, Crestoni ME, Simeoni F, Giulimondi F, Talora C, Botta B, Screpanti I, Palermo R. *Identification of a novel chalcone derivative that inhibits Notch signaling in T-cell acute lymphoblastic leukemia*. Sci Rep. 2017 May 19;7(1):2213. doi: 10.1038/s41598-017-02316-9.

Pyotr A Tyurin-Kuzmin*, **Nadezhda D Zhdanovskaya***, Anna A Sukhova, George D Sagaradze, Eugene A Albert, Ludmila A Ageeva, George V Sharonov, Vsevolod A Tkachuk *Nox4 and Duox1/2 Mediate Redox Activation of Mesenchymal Cell Migration by PDGF* PLoS One, 2016 Apr 25;11(4):e0154157. doi: 10.1371/journal.pone.0154157

*These authors contributed equally to this work

Sergey Nikulin, Alexander Aliper, Andrey Garazha, Dmitry Kamenskiy, **Nadezhda Zhdanovskaya**, Sergey Roumiantsev, Anton Buzdin, Andrey Ivashenko, Alex Zhavoronkov, *Analytical Regenerative Medicine Industry Framework*, ISBN: 978-0-9912902-0-8, http://biogerontology.ru/files/RM analytical framework 2013.pdf

Patents

Title: Inibitori di Notch per uso nel trattamento della leucemia linfoblastica acuta a cellule T. Inventori: Botta B, Screpanti I, Tottone L, Zhdanovskaya N, Ingallina C, Giulimondi F, Quaglio D, Palermo R, Mori M, Ghirga F.

Patent submission [Italian Patent Appl. (2016) N. 102016000132360] currently under international extension [PCT International Appl. (2017) PCT/IB2017/058204]

Conferences

The Notch meeting X 1-5 October 2017 (poster session) **Zhdanovskaya N**, Tottone L, Mori M, Screpanti I, Palermo R *Molecular mechanisms underlying Notch inhibition by chalcone 8*

Awarded grants

Application n AR11715C7F21AE0B Bando Ricerca 2017: Avvio alla Ricerca Tipo 1, Sapienza University of Rome funding.

Title: Identification and characterization of circular RNAs involved in T-cell acute lymphoblastic leukemia development

Personal data

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 °Codice in materia di protezione dei dati personali".

Firma Nadezda Zhdanovskaya