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Education

Sept 2021 - Oct 2021 Training, Python language (basics and advanced functions)

iFORM, Toulouse, France

Oct 2010 – *Oct* 2013 **PhD Student**

Institute of Chemical Biology and Fundamental Medicine, Novosibirsk, Russia

Oct 2010 Professional training, Nanobiotechnology

Belgorod State University, Belgorod, Russia

Sep 2005 – Jun 2010 MS, Chemistry

Novosibirsk State University, Novosibirsk, Russia

PhD Degree

June 2014 Multifunctional hybrids of nucleic acid constructions with carbon nanotubes

PhD thesis (Bioorganic chemistry)

Supervisor: Darya S. NOVOPASHINA, PhD

Defended at: Institute of Chemical Biology and Fundamental Medicine,

Novosibirsk, Russia

Research Experience

Employment

Feb 2020 - present Marie Skłodowska-Curie Researcher (Individual Fellowship) at the

Laboratoire de Chimie de Coordination CNRS, Toulouse, France

Aug 2014 – present Research Associate at the Laboratory of RNA Chemistry, Institute of Chemical

Biology and Fundamental Medicine (ICBFM), Novosibirsk, Russia

Oct 2010 – Jul 2014 Junior Researcher at the Laboratory of RNA Chemistry ICBFM Apr 2007 – Oct 2010 Research Assistant at the Laboratory of RNA Chemistry ICBFM

Short-term scientific visits

2018-2019 Gíner de los Ríos Invited professor at the University of Alcalá, Madrid, Spain

(3.5 months in total)

2013-2016 Visiting researcher at the Laboratoire de Chimie de Coordination CNRS

Toulouse, France (6 months in total)

2013-2015, 2021 Visiting researcher at the University of Lodz, Poland (5 months in total)

Visiting researcher at the University of Alcalá, Madrid, Spain (2 months in

total)

Teaching experience

Feb 2019 - present Assistant professor, lecturer in Biomaterials: properties, design, applications

(for master and postgraduate students)

Chair of Molecular Biology and Biotechnology, Department of Natural Sciences,

Novosibirsk State University, Novosibirsk, Russia

1 semester per year, 2 h per week

11 Prizes and Awards since 2009

17 students and interns supervised since 2010

Third-party funds raised

Beneficiary

Marie Skłodowska-Curie Individual Fellowship EUREKA "Design of multifunctional phosphorous dendritic systems for drug delivery", grant agreement No 844217 financed by European Union Horizon 2020 research and innovation programme (2020-2022)

Project leader

- Grant of the President of the Russian Federation No. MK-2278.2019.4 "Complexes of microRNA with dendrimers and their immunomodulating properties" (2019-2020)
- Grant of Russian Foundation for Basic Research (RFBR) for leading young research teams No. 18-33-20109 "Stimuli-sensitive dendrimer-based soft biomaterials for drug delivery" (2018-2020)
- Scientific Foundation Grant of Russian No. 16-15-10156 "Bioinspired multi-level nanoconstructions for the delivery of nucleic acid into cells" (2016-2018) (among 3 co-proposers)
- Grant of the President of the Russian Federation for young scientists No. 882.2016.4 "Novel types of supramolecular constructions for the transport of therapeutic nucleic acids into cells" (2016-2018)
- Grant of Russian Foundation for Basic Research (RFBR) for prospective young scientists No. 16-33-60152 "Novel dendrimer-based biomaterials as carriers for therapeutic nucleic acids" (2016-2018)
- RFBR Grant for Russia-Belarus joint young scientists groups No. 15-54-04068 "Complexes of proapoptotic microRNA with dendrimers for cancer gene therapy" (2015-2016)
- RFBR Grant for young researchers No. 14-03-31691 "Multifunctional hybrids of nucleic acid constructions with carbon nanotubes for the delivery of therapeutic nucleic acids into cells" (2014-2015)
- Grant of the President of the Russian Federation for young scientists No. 6266.2013.4 "Hybrids of nucleic acid constructions with carbon nanotubes for the design of RNA detection systems and the delivery of therapeutic nucleic acids into cells" (2013-2015)
- Grant of the Foundation for Assistance to Small Innovative Enterprises of the Russian Federation for young innovators in science "Multifunctional hybrids of pyrene conjugates of oligonucleotides with carbon nanotubes" (2011-2012) (industry project)

Total amount raised: $196707 EUR [1] + 32000000 RUB (\sim 550000 EUR^1) [2-10] = \sim 750000 EUR$

Research networks

Secondary proposer and Vice-chair of a Working Group in the COST Action CA17140 NANO2CLINIC "Cancer nanomedicine - from the bench to the bedside" (2018-2022) (>260 teams from 42 countries).

Vice-chair of the ICBFM team in the FP7-PEOPLE-IRSES NANOGENE Consortium "Nanomaterials-driven anti-cancer therapy" (2013-2016) (6 teams, 5 countries).

¹ Grant amounts were converted from RUB to EUR using conversion rates actual for the year of getting a grant.

Academic cooperation partners

- **Dr. Anne-Marie Caminade, Dr. Jean-Pierre Majoral** (Laboratoire de Chimie de Coordination CNRS, Toulouse, France) Design of multifunctional phosphorus dendrimers for drug delivery
- *Prof. Rafael Gómez, Prof. F. Javier de la Mata* (University of Alcalá, Madrid, Spain) Design of carbosilane dendrimers and dendrons for drug delivery
- **Prof. Barbara Klajnert** (University of Łódź, Poland) Intracellular delivery of photosensitizers for photodynamic therapy of skin cancers
- **Prof. Maria Bryszewska, Prof. Maksim Ionov** (University of Łódź, Poland), **Dr. Dzmitry Shcharbin** (Institute of Biophysics and Cell Engineering NASB, Minsk, Belarus) Intracellular delivery of apoptosis-inducing short regulatory nucleic acids
- **Prof. Dr. Ulf Kahlert** (University Hospital Magdeburg, Germany) Dendrimer-mediated drug delivery for anti-glioblastoma therapy
- Dr. Ekaterina Pashkina (Research Institute of Fundamental and Clinical Immunology, Novosibirsk, Russia) - Dendrimer-based constructions for immunotherapy and anti-cancer therapy
- Prof. Larisa Karpenko (Research Center of Virology and Biotechnology "Vector", Novosibirsk region, Russia) - Dendrimer-mediated delivery of DNA/RNA vaccines against viral infectious diseases

Honorary activities

Editorial boards

- Topic Editor of *Pharmaceutics* (MDPI)
- Topic Editor of Frontiers in Drug Delivery (Frontiers)
- Member of the Reviewer Board of Cancers (MDPI)

Scientific memberships

Russian National Committee of Biochemists and Molecular Biologists
 International Society for Nucleosides, Nucleotides and Nucleic Acids

Service to the academic community

Organisation of scientific meetings

Co-chair, COST NANO2CLINIC Online Conference: Characterization of nanomaterials towards safe and efficient nanodrugs, June 22-23, 2021

Peer-review activity

Journals: Biomolecules (MDPI), Cancers (MDPI), Chemosphere (Elsevier), International Immunopharmacology (Elsevier), International Journal of Molecular Sciences (MDPI), Journal of Drug Delivery Science and Technology (Elsevier), Journal of Functional Biomaterials (MDPI), Journal of Materials Chemistry B (RSC), Materials (MDPI), Molecules (MDPI), Nanoscale (RSC), Pharmaceutics (MDPI). >20 manuscripts in 2018-2021

Monographs/Book proposals: Taylor and Francis – CRC Press

Social activities

Popularization of - science

- Facebook page "Dendrimers at home" sharing recent advances in dendrimer science
 - https://www.facebook.com/dendrimersathome
- Video "Dendrimers for nanomedicine" in the frame of French Science Festival "Fête de la Science 2020"
 - https://www.youtube.com/watch?v=pgnhqXFC6rk&feature=emb_logo
- Interview "Voyage au coeur des pilules du futur" in the frame of European Researchers Night

https://exploreur.univ-toulouse.fr/voyage-au-coeur-des-nanomedicaments-avec-evgeny-apartsin

Dissemination

Administrator of the YouTube channel of the COST NANO2CLINIC Consortium https://www.youtube.com/channel/UCoj8Co96gGHBmAceQqkRDfg