

## Curriculum vitae: Kseniya Lubova



### Address

Shemyakin–Ovchinnikov Institute of  
bioorganic chemistry RAS, Moscow,  
Russia

### Contacts

<https://www.ibch.ru/en/users/1337>

## Education

2017– 2019	Russia, Moscow	Lomonosov Moscow State University	Masters in Biochemistry. Graduated with honors (4.82/5.0)
2013– 2017	Russia, Moscow	Lomonosov Moscow State University	Bachelor of Biochemistry. Graduated with honors (5.0/5.0)

## IBCh positions

2021–2024	Junior research fellow
2019–2023	Postgraduate

## Skills

- **Molecular biology techniques:** DNA&RNA extraction and manipulation, PCR techniques, in vitro RNA synthesis, site-directed mutagenesis, reverse transcription
- **Recombinant protein production:** gene design, expression in *E.coli*, *L.lactis*, *M.smegmatis*, fusion protein purification and cleavage
- **Protein purification:** affinity chromatography, HPLC, FPLC, SPE, SDS-PAGE, western blotting, immunoprecipitation
- **Electrophysiology:** *Xenopus laevis* oocytes injection, two-microelectrode voltage clamp
- **Spectrometry:** mass photometry, DLS, spectrophotometry
- **Structural biology:** Cryo-EM, crystallization
- **Computation skills:** working with genome sequences (searching in databases, online and offline tools, SnapGene), working with protein structures (searching in databases, PyMol, Phenix, UCSF Chimera, CryoSPARC, Relion, Coot), data processing (Excel, GraphPad Prism, Origin, ClampFit), working with literature (PubMed, Google Scholar, Mendeley)

## Language Proficiency

Russian, English

## Scientific interests

Structure-functional relationships in membrane transporters

## Scientific societies' membership

RBS

## Publications

1. Logashina YA, **Lubova KI**, Maleeva EE, Palikov VA, Palikova YA, Dyachenko IA, Andreev YA (2022). Analysis of Structural Determinants of Peptide MS 9a-1 Essential for Potentiating of TRPA1 Channel. *Mar*

*Drugs* 20 (7), , [10.3390/md20070465](https://doi.org/10.3390/md20070465)

2. Kalinovskii AP, Osmakov DI, Koshelev SG, **Lubova KI**, Korolkova YV, Kozlov SA, Andreev YA (2022). Retinoic Acid-Differentiated Neuroblastoma SH-SY5Y Is an Accessible In Vitro Model to Study Native Human Acid-Sensing Ion Channels 1a (ASIC1a). *Biology (Basel)* 11 (2), , [10.3390/biology11020167](https://doi.org/10.3390/biology11020167)
3. Osmakov DI, Korolkova YV, **Lubova KI**, Maleeva EE, Andreev YA, Kozlov SA (2021). The Role of the C-terminal Intracellular Domain in Acid-Sensing Ion Channel 3 Functioning. *J Evol Biochem Physiol* 57, 413–423, [10.1134/S0022093021020204](https://doi.org/10.1134/S0022093021020204)
4. **Lubova KI**, Chugunov AO, Volynsky PE, Trofimov Y, Korolkova YV, Mosharova IV, Kozlov SA, Andreev YA, Efremov RG (2020). Probing temperature and capsaicin-induced activation of TRPV1 channel via computationally guided point mutations in its pore and TRP domains. *Int J Biol Macromol* 158, 1175–1183, [10.1016/j.ijbiomac.2020.04.239](https://doi.org/10.1016/j.ijbiomac.2020.04.239)
5. Kalinina EV, Andreev YA, Petrova AS, **Lubova KI**, Shtil AA, Chernov NN, Novichkova MD, Nurmuradov NK (2018). Redox-Dependent Expression of Genes Encoding NADPH Oxidase 5 and the Key Antioxidant Enzymes during Formation of Drug Resistance of Tumor Cells to Cisplatin. *Bull Exp Biol Med* 165 (5), 678–681, [10.1007/s10517-018-4240-5](https://doi.org/10.1007/s10517-018-4240-5)