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Адрес

Федеральное государственное бюджетное учреждение науки Институт биоорганической химии им. академиков М.М. Шемякина и Ю.А. Овчинникова Российской академии наук, Москва, Россия

Контакты

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Образование

2025–2025	Россия, Москва	ФГАОУ ВО РНИМУ им. Н. И. Пирогова Минздрава России	Реализация Принципов GLP при организации и проведении регуляторных доклинических (неклинических) исследований (диплом о повышении квалификации)
2024–2024	Россия, Москва	АНО ДПО "Образовательный центр "Гарант"	Управление государственными и муниципальными закупками (диплом о профессиональной переподготовке)
2017–2020	Россия, Москва	МГУ им. М.В. Ломоносова, юридический факультет	бакалавр
2006–2011	Россия, Москва	МГУ им. М.В. Ломоносова, биологический факультет, кафедра биоорганической химии	специалист

Преподавание

2023–наст.вр.	Москва	Сеченовский университет
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Работа в ИБХ

2022–наст.вр.	Старший научный сотрудник
2026–2024	Доцент
2017–2022	Научный сотрудник

Членство в советах и комиссиях ИБХ

Методическая комиссия

Владение языками

английский

Награды

2016	Премия Правительства Москвы молодым ученым	За разработку методов биотехнологического получения и анализа механизмов действия фармакологически перспективных лигандов нейрорецепторов человека
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Научные интересы

аллостерические взаимодействия, нейрохимия, рациональный драг-дизайн, криминалистическая техника, интеллектуальная собственность, эмпирические методы в праве

Членство в сообществах

Европейское нейрохимическое общество (ESN) с 2015 г.

Международное общество токсикологии (IST) с 2021 г.

Степени и звания

2016 Кандидат наук (Биологические науки, 03.00.03 — Молекулярная биология)

Гранты и проекты

2016–2018 [Исследование молекулярного механизма ингибирования мышечного никотинового рецептора макалувамином G](#)

2021–2024 [Исследование роли цис-петельных рецепторов во взаимодействиях клеток глиобластомы с их микроокружением](#)

2018–2021 [Клинико-экспериментальное исследование на овцах эффективности миорелаксантного полипептида аземиопсина и его аналогов](#)

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- Gondarenko E, Mazur D, Siniavin A, Arkhangelskaya P, Maiorov V, Ivanov I, Kasheverov I, Antipova N, Shelukhina I, **Kudryavtsev D** (2026). Nicotinic Acetylcholine Receptor of $\alpha 7$ Subtype is Linked to Glioblastoma Cholinergic Heterogeneity. *J Mol Neurosci* 76 (2), , [10.1007/s12031-026-02523-y](#)
- Mozhaeva VA, Vassilevski AA, Starkov VG, **Kudryavtsev DS**, Prokhorov KA, Garnov SV, Utkin YN (2025). Identification of animal venoms by Raman spectroscopy combined with principal component analysis. *Microchem J* 219, , [10.1016/j.microc.2025.115966](#)
- Kuzmenkov AI, Chudetsky IS, **Kudryavtsev DS**, Kasheverov IE, Tsetlin VI, Vassilevski AA (2025). Molecular Probes for the Visualization of Nicotinic Acetylcholine Receptors Based on Snake Three-Finger Toxins and Red Fluorescent Protein. *Russ. J. Bioorganic Chem.* 51 (5), 1936–1944, [10.1134/S1068162025601673](#)
- Grebenshchikov ES, Pravednikova AE, Bezsonov EE, **Kudryavtsev DS**, Larina SN, Shidlovskii YV (2025). Linking SIRT1 Variants to Metabolic and Cardiovascular Phenotypes: Insights from Population Genetics and In Silico Structural Analysis. *Cell Biochem Biophys* 84 (1), 199–210, [10.1007/s12013-025-01903-2](#)
- Severyukhina MS, Ojomoko LO, Shelukhina IV, **Kudryavtsev DS**, Kryukova EV, Epifanova LA, Denisova DA, Averin AS, Ismailova AM, Shaykhutdinova ER, Dyachenko IA, Egorova NS, Murashev AN, Tsetlin VI, Utkin YN (2024). Non-conventional toxin WTX and its disulfide-fixed synthetic fragments: Interaction with nicotinic acetylcholine receptors and reduction of blood pressure. *Int J Biol Macromol* 288, 138626, [10.1016/j.ijbiomac.2024.138626](#)
- Melentiev PN, Kalmykov AS, Gritchenko AS, Shemeteva MP, Safonova AM, Markov MS, Balykin VI, Bukatin AS, Vaulin NV, Belov DA, Evstrapov AA, Baklykov DA, Andriyash AV, Barbasheva AA, Kuguk AK, Ryzhkov VV, Rodionov IA, **Kudryavtsev DS**, Mozhaeva VA, Son LV, Tsetlin VI, Khlebtsov BN, Kobzev MS, Kuznetsova YO, Sharipov BT, Yashkin AS, Alekseev YI (2024). Optical methods for detection of single biomolecules: visualization, sensorics, sequencing of DNA molecules. *PHYS-USP+* 67 (11), 1069–1083, [10.3367/UFNe.2024.07.039720](#)
- Kudryavtsev DS**, Mozhaeva VA, Ivanov IA, Siniavin AE, Kalmykov AS, Gritchenko AS, Khlebtsov BN, Wang SP, Kang B, Tsetlin VI, Balykin VI, Melentiev PN (2024). Optical detection of infectious SARS-CoV-2 virions by counting spikes. *Nanoscale* 16 (26), 12424–12430, [10.1039/d4nr01236d](#)
- Luo A, He J, Yu J, Wu Y, Harvey PJ, Kasheverov IE, **Kudryavtsev DS**, McIntosh JM, Tsetlin VI, Craik DJ,

- Zhangsun D, Luo S (2024). Aspartic acid mutagenesis of α O-Conotoxin GeXIVA isomers reveals arginine residues crucial for inhibition of the α 9 α 10 nicotinic acetylcholine receptor. *Int J Biol Macromol* 271 (Pt 1), 132472, [10.1016/j.ijbiomac.2024.132472](https://doi.org/10.1016/j.ijbiomac.2024.132472)
9. Mozhaeva VA, Starkov VG, **Kudryavtsev DS**, Prokhorov KA, Garnov SV, Utkin YN (2024). Analysis of intra-specific variations in the venom of individual snakes based on Raman spectroscopy. *Spectrochim Acta A* 314, 124239, [10.1016/j.saa.2024.124239](https://doi.org/10.1016/j.saa.2024.124239)
 10. Son L, Kost V, Maiorov V, Sukhov D, Arkhangelskaya P, Ivanov I, **Kudryavtsev D**, Siniavin A, Utkin Y, Kasheverov I (2024). Efficient Expression in *Leishmania tarentolae* (LEXSY) of the Receptor-Binding Domain of the SARS-CoV-2 S-Protein and the Acetylcholine-Binding Protein from *Lymnaea stagnalis*. *Molecules* 29 (5), , [10.3390/molecules29050943](https://doi.org/10.3390/molecules29050943)
 11. Gondarenko E, Mazur D, Masliakova M, Ryabukha Y, Kasheverov I, Utkin Y, Tsetlin V, Shahparonov M, **Kudryavtsev D**, Antipova N (2024). Subtype-Selective Peptide and Protein Neurotoxic Inhibitors of Nicotinic Acetylcholine Receptors Enhance Proliferation of Patient-Derived Glioblastoma Cell Lines. *Toxins (Basel)* 16 (2), 80, [10.3390/toxins16020080](https://doi.org/10.3390/toxins16020080)
 12. Kost V, Sukhov D, Ivanov I, Kasheverov I, Ojomoko L, Shelukhina I, Mozhaeva V, **Kudryavtsev D**, Feofanov A, Ignatova A, Utkin Y, Tsetlin V (2023). Comparison of Conformations and Interactions with Nicotinic Acetylcholine Receptors for *E. coli*-Produced and Synthetic Three-Finger Protein SLURP-1. *Int J Mol Sci* 24 (23), 16950, [10.3390/ijms242316950](https://doi.org/10.3390/ijms242316950)
 13. Kalinovskii AP, Pushkarev AP, Mikhailenko AD, **Kudryavtsev DS**, Belozerova OA, Shmygarev VI, Yatskin ON, Korolkova YV, Kozlov SA, Osmakov DI, Popov A, Andreev YA (2023). Dual Modulator of ASIC Channels and GABAA Receptors from Thyme Alters Fear-Related Hippocampal Activity. *Int J Mol Sci* 24 (17), , [10.3390/ijms241713148](https://doi.org/10.3390/ijms241713148)
 14. Mozhaeva V, Starkov V, **Kudryavtsev D**, Prokhorov K, Garnov S, Utkin Y (2023). Differentiation of snake venom using Raman spectroscopic analysis. *J Mater Chem B Mater Biol Med* 11 (27), 6435–6442, [10.1039/d3tb00829k](https://doi.org/10.1039/d3tb00829k)
 15. Ivanov IA, Siniavin AE, Palikov VA, Senko DA, Shelukhina IV, Epifanova LA, Ojomoko LO, Belukhina SY, Prokopev NA, Landau MA, Palikova YA, Kazakov VA, Borozdina NA, Bervinova AV, Dyachenko IA, Kasheverov IE, Tsetlin VI, **Kudryavtsev DS** (2023). Analogs of 6-Bromohypaphorine with Increased Agonist Potency for α 7 Nicotinic Receptor as Anti-Inflammatory Analgesic Agents. *Mar Drugs* 21 (6), 368, [10.3390/md21060368](https://doi.org/10.3390/md21060368)
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 17. Mozhaeva V, **Kudryavtsev D**, Prokhorov K, Utkin Y, Gudkov S, Garnov S, Kasheverov I, Tsetlin V (2022). Toxins' classification through Raman spectroscopy with principal component analysis. *Spectrochim Acta A* 278, 121276, [10.1016/j.saa.2022.121276](https://doi.org/10.1016/j.saa.2022.121276)
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- Starkov VG, Osipov AV, Lummis SCR, Tsetlin VI, Utkin YN (2021). Snake venom phospholipase A2s exhibit strong virucidal activity against SARS-CoV-2 and inhibit the viral spike glycoprotein interaction with ACE2. *Cell Mol Life Sci* 78 (23), 7777–7794, [10.1007/s00018-021-03985-6](https://doi.org/10.1007/s00018-021-03985-6)
23. **Kudryavtsev D**, Isaeva A, Barkova D, Spirova E, Mukhutdinova R, Kasheverov I, Tsetlin V (2021). Point Mutations of Nicotinic Receptor $\alpha 1$ Subunit Reveal New Molecular Features of G153S Slow-Channel Myasthenia. *Molecules* 26 (5), , [10.3390/molecules26051278](https://doi.org/10.3390/molecules26051278)
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29. Semenov AN, Lugovtsov AE, Shirshin EA, Yakimov BP, Ermolinskiy PB, Bikmulina PY, **Kudryavtsev DS**, Timashev PS, Muravyov AV, Wagner C, Shin S, Priezzhev AV (2020). Assessment of Fibrinogen Macromolecules Interaction with Red Blood Cells Membrane by Means of Laser Aggregometry, Flow Cytometry, and Optical Tweezers Combined with Microfluidics. *Biomolecules* 10 (10), 1–20, [10.3390/biom10101448](https://doi.org/10.3390/biom10101448)
30. **(конференция)** Utkin Y, Kuch U, Osipov A, Kasheverov I, **Kudryavtsev D**, Starkov V, Ziganshin R, Mebs D, Tsetlin V (2020). Three finger neurotoxins: Recent discoveries and arising questions. *Toxicon* 177 Suppl 1, S10–S11, [10.1016/j.toxicon.2019.10.048](https://doi.org/10.1016/j.toxicon.2019.10.048)
31. Vulfius CA, Lebedev DS, Kryukova EV, **Kudryavtsev DS**, Kolbaev SN, Utkin YN, Tsetlin VI (2020). NU-120596, a Positive Allosteric Modulator of Mammalian $\alpha 7$ Nicotinic Acetylcholine Receptor, is a Negative Modulator of Ligand-Gated Chloride-Selective Channels of the Gastropod *Lymnaea stagnalis*. *J Neurochem* 155 (3), 274–284, [10.1111/jnc.15020](https://doi.org/10.1111/jnc.15020)
32. Siniavin AE, Streltsova MA, **Kudryavtsev DS**, Shelukhina IV, Utkin YuN, Tsetlin VI (2020). Activation of $\alpha 7$ Nicotinic Acetylcholine Receptor Upregulates HLA-DR and Macrophage Receptors: Potential Role in Adaptive Immunity and in Preventing Immunosuppression. *Biomolecules* 10 (4), 507, [10.3390/biom10040507](https://doi.org/10.3390/biom10040507)
33. **Kudryavtsev DS**, Tabakmakher VM, Budylin GS, Egorova NS, Efremov RG, Ivanov IA, Belukhina SY, Jegorov AV, Kasheverov IE, Kryukova EV, Shelukhina IV, Shirshin EA, Zhdanova NG, Zhmak MN, Tsetlin VI (2020). Complex approach for analysis of snake venom α -neurotoxins binding to HAP, the high-affinity peptide. *Sci Rep* 10 (1), 3861, [10.1038/s41598-020-60768-y](https://doi.org/10.1038/s41598-020-60768-y)
34. Akimov MG, **Kudryavtsev DS**, Kryukova EV, Fomina-Ageeva EV, Zakharov SS, Gretskeya NM, Zinchenko GN, Serkov IV, Makhaeva GF, Boltneva NP, Kovaleva NV, Serebryakova OG, Lushchekina SV, Palikov VA, Palikova Y, Dyachenko IA, Kasheverov IE, Tsetlin VI, Bezuglov VV (2020). Arachidonoylcholine and Other Unsaturated Long-Chain Acylcholines Are Endogenous Modulators of the Acetylcholine Signaling System. *Biomolecules* 10 (2), , [10.3390/biom10020283](https://doi.org/10.3390/biom10020283)
35. Lebedev D, Kryukova E, Ivanov I, Egorova N, Timofeev N, Spirova E, Tufanova E, Siniavin A, **Kudryavtsev D**, Kasheverov I, Zouridakis M, Katsarava R, Zavrashvili N, Iagorshvili I, Tzartos S, Tsetlin V (2019). Oligoarginine Peptides, a New Family of nAChR Inhibitors. *Mol Pharmacol* 96 (5), 664–673, [10.1124/mol.119.117713](https://doi.org/10.1124/mol.119.117713)
36. **(конференция)** Siniavin AE, Streltsova MA, **Kudryavtsev DS**, Tsetlin VI (2019). $\alpha 7$ nicotine acetylcholine

- receptor (nAChR) agonists strongly activate classical macrophages and increase the expression of HLA-DR molecules. *Allergy* 74 (S106), 138, [10.1111/all.13959](https://doi.org/10.1111/all.13959)
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 38. Kryukova EV, Egorova NS, **Kudryavtsev DS**, Lebedev DS, Spirova EN, Zhmak MN, Garifulina AI, Kasheverov IE, Utkin YN, Tsetlin VI (2019). From Synthetic Fragments of Endogenous Three-Finger Proteins to Potential Drugs. *Front Pharmacol* 10, 748, [10.3389/fphar.2019.00748](https://doi.org/10.3389/fphar.2019.00748)
 39. **(конференция)** Melentiev P, Son L, **Kudryavtsev D**, Afanasiev A, Kasheverov I, Tsetlin V, Balykin V (2019). Ultra-fast single troponine-T molecule sensing. *Optics InfoBase Conference Papers* , , [10.1109/CLEOE-EQEC.2019.8872744](https://doi.org/10.1109/CLEOE-EQEC.2019.8872744)
 40. Utkin Y, Vassilevski A, **Kudryavtsev D**, Undheim EAB (2019). Editorial: Animal Toxins as Comprehensive Pharmacological Tools to Identify Diverse Ion Channels. *Front Pharmacol* 10 (APR), 423, [10.3389/fphar.2019.00423](https://doi.org/10.3389/fphar.2019.00423)
 41. **(конференция)** Melentiev P, Son L, **Kudryavtsev D**, Afanasiev A, Kasheverov I, Tsetlin V, Balykin V (2019). Ultra-fast single troponine-T molecule sensing. *Optics InfoBase Conference Papers Part F140-CLEO_Europe 2019*, .
 42. Spirova EN, Ivanov IA, Kasheverov IE, **Kudryavtsev DS**, Shelukhina IV, Garifulina AI, Son LV, Lummis SCR, Malca-Garcia GR, Bussmann RW, Hennig L, Giannis A, Tsetlin VI (2019). Curare alkaloids from Matis Dart Poison: Comparison with d-tubocurarine in interactions with nicotinic, 5-HT₃ serotonin and GABAA receptors. *PLoS One* 14 (1), e0210182, [10.1371/journal.pone.0210182](https://doi.org/10.1371/journal.pone.0210182)
 43. Diankin ID, **Kudryavtsev DS**, Zalevsky AO, Tsetlin VI, Golovin AV (2018). New binding mode of SLURP protein to $\alpha 7$ nicotinic acetylcholine receptor revealed by computer simulations. *Supercomputing Frontiers and Innovations* 5 (4), 73–77, [10.14529/jsfi180407](https://doi.org/10.14529/jsfi180407)
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 45. **Kudryavtsev DS**, Spirova EN, Shelukhina IV, Son LV, Makarova YV, Utkina NK, Kasheverov IE, Tsetlin VI (2018). Makaluvamine G from the Marine Sponge *Zyzzia fuliginosa* Inhibits Muscle nAChR by Binding at the Orthosteric and Allosteric Sites. *Mar Drugs* 16 (4), , [10.3390/md16040109](https://doi.org/10.3390/md16040109)
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 49. Vulfius CA, Spirova EN, Serebryakova MV, Shelukhina IV, **Kudryavtsev DS**, Kryukova EV, Starkov VG, Kopylova NV, Zhmak MN, Ivanov IA, Kudryashova KS, Andreeva TV, Tsetlin VI, Utkin YN (2016). Peptides from puff adder *Bitis arietans* venom, novel inhibitors of nicotinic acetylcholine receptors. *Toxicon* 121, 70–76, [10.1016/j.toxicon.2016.08.020](https://doi.org/10.1016/j.toxicon.2016.08.020)
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