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Адрес

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Контакты

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Образование

1970– 2001	Россия, Москва	Институт биоорганической химии им. академиков М.М. Шемякина и Ю.А. Овчинникова РАН (ИБХ)	Присвоено учёное звание профессора
1970– 1993	Россия, Москва	Институт биоорганической химии им. академиков М.М. Шемякина и Ю.А. Овчинникова РАН (ИБХ)	Присуждена учёная степень доктора химических наук за диссертацию «Неогликоконъюгаты: синтез и применение для гемо- и онкодиагностики»
1970– 1982	Россия, Москва	Институт биоорганической химии имени М.М. Шемякина АН СССР (ИБХ)	Присуждена учёная степень кандидата химических наук за диссертацию «Синтез группоспецифических олигосахаридов крови H, A и Lea, и их иммобилизация на полимерной матрице»
1971– 1976	Россия, Москва	Московский государственный университет имени М.В. Ломоносова (МГУ), химический факультет	Диплом химика

Работа в ИБХ

2018–наст.вр.	Заведующий отделом
2021–наст.вр.	Главный научный сотрудник

Членство в советах и комиссиях ИБХ

Диссертационный совет
Ученый совет

Награды

2010	Медаль Ордена «За заслуги перед Отечеством» II степени
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Членство в сообществах

- Член Учёного и Диссертационного советов ИБХ им. М.М. Шемякина и Ю.А. Овчинникова РАН;
- Член Учёного совета ИОХ им. Н.Д. Зелинского РАН;
- Член редколлегии журналов Glycoconjugate Journal и Carbohydrate Letters;
- Национальный представитель в IGO (International Glycocojugate Organization).

Степени и звания

Профессор

Доктор наук (Химические науки)

Гранты и проекты

2020–2022 [Молекулярный инструментарий для изучения гликан-связывающих белков растений](#)

2020–2022 [Выявление дополнительных механизмов узнавания и адгезии вируса SARS-CoV-2 на эпителиальных клетках человека и разработка нового метода противовирусной терапии](#)

2018–2022 [Исследование анти-сиалозидных антител человека методами химической биологии](#)

Публикации

1. Tuzikov A, Shilova N, Ovchinnikova T, Nokel A, Patova O, Knirel Y, Chernova T, Gorshkova T, **Bovin N** (2024). Labeling of Polysaccharides with Biotin and Fluorescent Dyes. *Polysaccharides* 5 (1), 1–15, [10.3390/polysaccharides5010001](#)
2. Tuzikov AB, Ovchinnikova TV, Nizovtsev AV, **Bovin NV**, Gorshkov TA, Chernova TE, Shilova NV (2024). Fluorescent glycopolymers for probing plant glycan-binding proteins. *MENDELEEV COMMUN* 34 (1), 13–14, [10.1016/j.mencom.2024.01.004](#)
3. Vaskan I, Dimitreva V, Petoukhov M, Shtykova E, **Bovin N**, Tuzikov A, Tretyak M, Oleinikov V, Zalygin A (2024). Effect of ligand and shell densities on the surface structure of core–shell nanoparticles self-assembled from function–spacer–lipid constructs. *Biomater Sci* 12 (3), 798–806, [10.1039/d3bm01704d](#)
4. Nikulin MP, Shilova NV, Lipatnikov AD, Stilidi IS, Semyanikhina AV, **Bovin NV**, Tupitsyn NN (2023). Innate IgM antibodies to mannose in patients with gastric cancer. *Cancer Biol Med* 21 (3), 193–197, [10.20892/j.issn.2095-3941.2023.0156](#)
5. Hughes JR, McMorrow KJ, **Bovin N**, Miller DJ (2023). An oviduct glycan increases sperm lifespan by diminishing the production of ubiquinone and reactive oxygen species. *Biol Reprod* 109 (3), 356–366, [10.1093/biolre/ioad074](#)
6. Melikhova TD, **Bovin NV**, Antipov AD, Tereshin MN, Ziganshin RH, Tuzikov AB (2023). Sortase-promoted synthesis of homooligomers from a monomeric protein. *MENDELEEV COMMUN* 33 (5), 624–626, [10.1016/j.mencom.2023.09.011](#)
7. Olivera-Ardid S, Bello-Gil D, Perez-Cruz M, Costa C, Camoez M, Dominguez MA, Ferrero-Alves Y, Vaquero JM, Khasbiullina N, Shilova NV, **Bovin NV**, Mañez R (2023). Removal of natural anti- α Gal antibodies elicits protective immunity against Gram-negative bacterial infections. *Front Immunol* 14, 1232924, [10.3389/fimmu.2023.1232924](#)
8. Pramanik S, Mondal S, Chinarev A, **Bovin NV**, Saha J (2023). Hydroxamate-directed access to β -Kdo glycosides. *Chem Commun (Camb)* 59 (66), 10028–10031, [10.1039/d3cc02609d](#)
9. Petrakova DO, Savchenko MS, Popova IS, Tuzikov AB, Paramonov AS, Chizhov AO, **Bovin NV**, Ryzhov IM (2023). Synthesis of Glycolipid Analogs Containing A (Type 2) Tetrasaccharide. *Russ. J. Bioorganic Chem.* 49 (4), 785–796, [10.1134/S1068162023040143](#)
10. Rapoport EM, Ryzhov IM, Slivka EV, Korchagina EY, Popova IS, Khaidukov SV, André S, Kaltner H, Gabius HJ, Henry S, **Bovin NV** (2023). Galectin-9 as a Potential Modulator of Lymphocyte Adhesion to Endothelium via Binding to Blood Group H Glycan. *Biomolecules* 13 (8), , [10.3390/biom13081166](#)
11. Ziganshina MM, Shilova NV, Khalturina EO, Dolgushina NV, V Borisevich S, Yarotskaya EL, **Bovin NV**, Sukhikh GT (2023). Antibody-Dependent Enhancement with a Focus on SARS-CoV-2 and Anti-Glycan Antibodies. *Viruses* 15 (7), 1584, [10.3390/v15071584](#)
12. Contreras M, Vaz-Rodrigues R, Mazuecos L, Villar M, Artigas-Jerónimo S, González-García A, Shilova NV, **Bovin NV**, Díaz-Sánchez S, Ferreras-Colino E, Pacheco I, Chmelař J, Kopáček P, Cabezas-Cruz A, Gortázar

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 17. Pazynina GV, Tsygankova SV, Sablina MA, Shilova NV, Paramonov AS, Chizhov AO, **Bovin NV** (2023). Synthesis of Sug1-4GalNAc α disaccharides and their interaction with human blood antibodies. *MENDELEEV COMMUN* 33 (1), 107–108, [10.1016/j.mencom.2023.01.033](https://doi.org/10.1016/j.mencom.2023.01.033)
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34. (конференция) Maslennikov AM, Zalygin AV, Shtykova EV, **Bovin NV**, Oleinikov VA (2021). Small-angle X-ray (SAXS) and Raman spectroscopy studies of biot-CMG(2)-DOPE quasicrystalline phases. *J Phys Conf Ser* 2058 (1), , [10.1088/1742-6596/2058/1/012018](https://doi.org/10.1088/1742-6596/2058/1/012018)
35. (конференция) Tarasova AR, Vaskan IS, Zalygin AV, Troitskaya PS, **Bovin NV**, Oleinikov VA (2021). Loading efficiency of doxorubicin into the micelle-like structures formed by function-spacer-lipid constructs self-assembly depends on constructs' functional part. *J Phys Conf Ser* 2058 (1), , [10.1088/1742-6596/2058/1/012003](https://doi.org/10.1088/1742-6596/2058/1/012003)
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37. (конференция) Цыганкова СВ, Пазынина ГВ, **Бовин НВ** (2021). СИНТЕЗ ДИСАХАРИДА Хуβ1-2Manβ – КОРОВОГО ФРАГМЕНТА РАСТИТЕЛЬНЫХ N-ГЛИКОПРОТЕИНОВ. Сборник тезисов V Всероссийской конференции «Фундаментальная гликобиология» 21-24 сентября 2021 г. Гатчина , .
38. Mikolajczyk K, Bereznicka A, Szymczak-Kulus K, Haczkiwicz-Lesniak K, Szulc B, Olczak M, Rossowska J, Majorczyk E, Kapczynska K, **Bovin N**, Lisowska M, Kaczmarek R, Miazek A, Czerwinski M (2021). Missing the sweet spot: One of the two N-glycans on human Gb3/CD77 synthase is expendable. *Glycobiology* 31 (9), 1145–1162, [10.1093/glycob/cwab041](https://doi.org/10.1093/glycob/cwab041)
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42. Ryzhov IM, Tuzikov AB, Nizovtsev AV, Baidakova LK, Galanina OE, Shilova NV, Ziganshina MM, Dolgushina NV, Bayramova GR, Sukhikh GT, Williams EC, Nagappan R, Henry SM, **Bovin NV** (2021). SARS-CoV-2 Peptide Bioconjugates Designed for Antibody Diagnostics. *Bioconjug Chem* 32 (8), 1606–1616, [10.1021/acs.bioconjchem.1c00186](https://doi.org/10.1021/acs.bioconjchem.1c00186)
43. (книга) **Bovin NV**, Obukhova PS, Galanina OE, Antipova NV, Dobrochaeva KL, Khasbiullina NR, Shilova NV (2021). Is it time to switch over to glyco molecular patterns? *Nova Science Publishers* , 377–395.
44. Tuzikov AB, Rapoport EM, Khaidukov SV, Nokel EA, Knirel YA, **Bovin NV** (2021). Synthesis of bodipy-labeled bacterial polysaccharides and their interaction with human dendritic cells. *Glycoconj J* 38 (3), 369–374, [10.1007/s10719-021-09993-9](https://doi.org/10.1007/s10719-021-09993-9)
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