Curriculum vitae: Svetlana Guryanova



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Education

1987–1991	Moscow	PhD student in IBCH	
1982–1987	Moscow	Moscow State University	

Work experience

1994–2017	Moscow	Researcher, Laboratory of Peptide Chemistry IBCH RAS	
1991–1994	Moscow	Junior Researcher, Laboratory of Peptide Chemistry IBCH RAS	

IBCh positions

2018–to date	Research fellow	
	Research fellow	
2026–2026	Associate Professor	

IBCh memberships

	Trade union committee

Language Proficiency

Russian, English

Scientific interests

Guryanova Svetlana Vladimirovna has been working at the IBCh RAS since 1987, after graduating from the Biology Department, Lomonosov Moscow State University. In 1993, Guryanova S.V. got Ph.D. degree at the Institute of Bioorganic Chemistry, Russian Academy of Sciences, on the topic "Study of the immunomodulatory properties of synthetic bacterial glycopeptides", specialty molecular biology. Scientific activity of S.V. Guryanova is devoted to the study of the features of the functioning of the innate immunity during inflammation, pathophysiological processes, in models of allergic, pulmonary and neurodegenerative diseases, the definition of molecular mechanisms underlying the transmission of the signal of interaction of ligands with NLR -receptors, as well as the effect of ligands of innate immunity on the pathogenesis of significant diseases. As an expert S.V. Guryanova was invited to the international systems biology project SBV Improver Challenge, and in 2014 she was recognized as the best expert along with 10 representatives from other countries. Guryanova S.V. under a contract with the Ministry of Education and Science organized and took part in preclinical and clinical trials of promising drugs, has extensive experience in conducting

post-marketing clinical trials in compliance with all regulations.

Guryanova S.V. is the author of over 90 scientific publications, co-author of monographs: 1) Modern Approach to Systems Biology. Biological Networks and Pathway Analysis. Springer / Edited by Editors: Tatiana V. Tatarinova, Yuri Nikolsky. 2017. Publ. Humana Press Inc., Totowa, NJ, United States., 2) Potential Role for Ceramides in Neurodegenerative Diseases ./ Sphingomyelin and Ceramides: Occurrence, Biosynthesis and Role in Disease, Edited by Editors: Cecilia L. Watkins, 2015: Nova Science Publishers ., ISBN: 978-1-63482-553-5, Reports have been repeatedly noted in national and international scientific events. Guryanova S.V. is the author of two patents.

Guryanova S.V. collaborates with the laboratories of the Institute of Biochemical Chemistry of the Russian Academy of Sciences and the branch of the IBCh RAS, the Institute of Biochemical Physics named after N.M. Emanuel RAS, Institute of Biochemistry. Bach RAS, FGBU SSC Institute of Immunology, FMBA of Russia, Moscow State University named after M.V. Lomonosov, First Moscow State Medical University , RUDN University, Russian National Research Medical University, the Institute of Gerontology (St. Petersburg), Kazan State Medical University, Kuban State University, FGBOU Kuban State University of Physical Culture, Sports and Tourism, with foreign scientific, educational centers and pharmaceutical companies.

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Scientific societies' membership

Member of EAACI, RASEP

Titles

2024	Doctor of Science (Biological sciences)
1993	Doctor of Philosophy (Biological sciences)

Publications

1. **Guryanova SV**, Belogurova-Ovchinnikova OY, Ovchinnikova TV (2026). Human and Marine Host Defense Peptides for Healthy Skin. *Mar Drugs* 24 (4), 134, 10.3390/md24040134
2. Radaev NE, Azova MM, Dzhunushalieva NK, **Guryanova SV** (2026). Intronic enhancers: regulatory roles in tissue differentiation and human diseases. *Вестник РУДН. Серия: Медицина* 30 (3), 356–376, 10.22363/2313-0245-2025-30-3-356-376
3. **Guryanova SV**, Ovchinnikova TV (2025). Multifaceted Marine Peptides and Their Therapeutic Potential. *Mar Drugs* 23 (7), 288, 10.3390/md23070288
4. **Guryanova SV**, Maksimova TV, Azova MM (2025). Transcription Factors and Methods for the Pharmacological Correction of Their Activity. *Int J Mol Sci* 26 (13), 6394, 10.3390/ijms26136394
5. **Guryanova SV** (2024). Bacteria and Allergic Diseases. *Int J Mol Sci* 25 (19), 10298, 10.3390/ijms251910298
6. **Guryanova SV** (2024). Influence of muramyl peptides on the production of chemokines, growth factors, pro-inflammatory and anti-inflammatory cytokines. *Вестник РУДН. Серия: Медицина* 28 (3), 365–376, 10.22363/2313-0245-2024-28-3-365-376
7. **Guryanova SV**, Sigmatulin IA, Gigani OO, Lipkina SA (2023). Mechanisms of Regulation Allergic and Autoimmune Reactions by Bacterial Origin Bioregulators. *Вестник РУДН. Серия: Медицина* 27 (4), 470–482, 10.22363/2313-0245-2023-27-4-470-482

8. **Guryanova SV**, Balandin SV, Belogurova-Ovchinnikova OY, Ovchinnikova TV (2023). Marine Invertebrate Antimicrobial Peptides and Their Potential as Novel Peptide Antibiotics. *Mar Drugs* 21 (10), 503, 10.3390/md21100503
9. **Guryanova SV** (2023). Immunomodulation, Bioavailability and Safety of Bacteriocins. *Life (Basel)* 13 (7), 1521, 10.3390/life13071521
10. **Guryanova SV**, Kataeva A (2023). Inflammation Regulation by Bacterial Molecular Patterns. *Biomedicines* 11 (1), 183, 10.3390/biomedicines11010183
11. **Guryanova SV**, Ferberg AS, Sigmatulin IA (2023). Inflammatory response modulation by epinephrine and norepinephrine. *Вестник РУДН. Серия: Медицина* 27 (3), 329–341, 10.22363/2313-0245-2023-27-3-329-341
12. Sizyakina LP, Zakurskaya VY, **Guryanova SV** (2023). Glucosaminylmuramyl dipeptide efficacy in post-COVID-19 patient rehabilitation treatment. *Inf. dis.* (1), 17–25, 10.33029/2305-3496-2023-12-1-17-25
13. **Guryanova SV**, Ovchinnikova TV (2022). Innate Immunity Mechanisms in Marine Multicellular Organisms. *Mar Drugs* 20 (9), , 10.3390/md20090549
14. **Guryanova SV** (2022). Regulation of Immune Homeostasis via Muramyl Peptides-Low Molecular Weight Bioregulators of Bacterial Origin. *Microorganisms* 10 ((8)), 1526, 10.3390/microorganisms10081526
15. **Guryanova SV**, Finkina EI, Melnikova DN, Bogdanov IV, Bohle B, Ovchinnikova TV (2022). How Do Pollen Allergens Sensitize? *Front Mol Biosci* 9, 900533, 10.3389/fmolb.2022.900533
16. **Guryanova SV**, Ovchinnikova TV (2022). Immunomodulatory and Allergenic Properties of Antimicrobial Peptides. *Int J Mol Sci* 23 (5), , 10.3390/ijms23052499
17. **Guryanova SV**, Gigani OB, Gudima GO, Kataeva AM, Kolesnikova NV (2022). Dual Effect of Low-Molecular-Weight Bioregulators of Bacterial Origin in Experimental Model of Asthma. *Life (Basel)* 12 (2), 192, 10.3390/life12020192
18. **Guryanova SV**, Kudryashova NA, Kataeva A, Orozbekova BT, Kolesnikova NV, Chuchalin AG (2021). Novel approaches to increase resistance to acute respiratory infections. *Вестник РУДН. Серия: Медицина* 25 (3), 181–195, 10.22363/2313-0245-2021-25-3-181-195
19. **Guryanova SV**, Khaitov RM (2021). Strategies for Using Muramyl Peptides - Modulators of Innate Immunity of Bacterial Origin - in Medicine. *Front Immunol* 12, 607178, 10.3389/fimmu.2021.607178
20. **Guryanova SV**, Kolesnikova NV, Gudima GO, Lezhava NL, Karaulov AV (2021). Dynamics of immunological and microbiological indicators of oral fluid in caries therapy. *Immunologiya* 42 (4), 386–394, 10.33029/0206-4952-2021-42-4-386-394
21. Kuznetsova EG, Kuryleva OM, Salomatina LA, Kursakov SV, **Guryanova SV**, Sevastyanov VI (2020). Influence of microemulsion components on transdermal delivery of immunomodulator glucosaminylmuramyl dipeptide. *Vestnik Transplantologii i Iskusstvennykh Organov* 22 (3), 149–155, 10.15825/1995-1191-2020-3-149-155
22. **Guryanova SV**, Gaponov AM, Pisarev VM, Yakushenko EV, Tutelyan AV, Alexandrov IA, Tsipandina EV, Kozlov IG (2020). Glucosaminylmuramyl dipeptide acid (GMDP-A) modulates intracellular signaling pathways in natural killer cells. *Immunologiya* 41 (3), 235–248, 10.33029/0206-4952-2020-41-3-235-248
23. Konorev MR, **Guryanova SV**, Tyshevich EN, Pavlyukov RA, Borisova OY (2020). Advisable including glucosaminylmuramyldipeptide in Helicobacter pylori therapy: experience of ten-year investigation. *Вестник РУДН. Серия: Медицина* 24 (3), 269–282, 10.22363/2313-0245-2020-24-3-269-282
24. Abramashvili YG, Kolesnikova NV, Borisova OY, **Guryanova SV** (2020). Low molecular weight bioregulator of bacterial origin in condylomatosis therapy optimization. *Вестник РУДН. Серия: Медицина* 24 (2), 163–167, 10.22363/2313-0245-2020-24-2-163-167
25. **Guryanova SV**, Khaitov RM (2020). Glucosaminyl muramy ldipeptide in treatment and prevention of infectious diseases. *Inf. dis.* 9 (3), 79–86, 10.33029/2305-3496-2020-9-3-79-86
26. **Guryanova SV**, Khaitov RM (2020). Glucosaminylmuramyldipeptide – GMDP: effect on mucosal immunity (on the issue of immunotherapy and immunoprophylaxis). *Immunologiya* 41 (2), 174–183, 10.33029/0206-4952-2020-41-2-174-183

27. Kursakov SV, Kuznetsova EG, Kuryleva OM, Salomatina LA, **Guryanova SV**, Borisova OY, Gudima GO, Sevastyanov VI (2020). Development and validation of method for glucosaminylmuramyl dipeptide determining in aqueous solutions by high-performance liquid chromatography. *Immunologiya* 41 (1), 74–82, 10.33029/0206-4952-2020-41-1-74-82
28. **(conference)** Sizyakina , Andreeva , Andronova , **Гурьянова СВ** (2020). Effect of Glucosaminyl Muramyl Dipeptide on the Immune System of Patients with Primary Variable Immune Deficiency and Agammaglobulinemia. *Allergy* 75 (S109), 1–643, 10.1111/all.14504
29. **(conference) Гурьянова СВ** (2019). The Role of NOD2 Ligands Muramyl Peptides in Chemotherapy Induced Cytopenia. *European Journal Immunology* 49 (S3), 1–2223, 10.1002/eji.201970400
30. **Guryanova S**, Udzhukhu V, Kubylinsky A (2019). Pathogenetic Therapy of Psoriasis by Muramyl Peptide. *Front Immunol* 10 (JUN), 1275, 10.3389/fimmu.2019.01275
31. **Гурьянова СВ** (2018). Интегрированные подходы в диагностике и терапии аллергических заболеваний. *Вестник РУДН. Серия: Медицина* 22 (1), 75–85, 10.22363/2313-0245-2018-22-1-75-85
32. **(conference) Guryanova S** (2018). Antibiotic Resistance: Ligands of Innate Immunity Take the Challenge. *Allergy* 73, 581, 10.1111/all.13539
33. **(conference) Guryanova S**, Shevchenko M, Sapozhnikov A (2018). New Approaches for Asthma Modelling. 10, 59–69.
34. **Guryanova SV** (2017). Identification of markers and checkpoints of copd with the help of modern approaches of system biomedicine and bioinformatics. *International Journal on Immunorehabilitation* 19 (2), 94–95.
35. **(book) Guryanova S**, Guryanova A (2017). sbv IMPROVER: Modern approach to systems biology. *Methods Mol Biol* 1613, 21–29, 10.1007/978-1-4939-7027-82
36. Manapova ER, Fazylov VC, **Guryanova SV** (2017). Cytopenias and their correction during antiviral therapy of chronic hepatitis C in patients with genotype 1. *Vopr Virusol* 62 (4), 174–178, 10.18821/0507-4088-2017-62-4-174-178
37. Гаврилова СИ, Алесенко АВ, **Гурьянова СВ** (2017). КЛИНИКО-БИОЛОГИЧЕСКИЕ ЭФФЕКТЫ ЦЕРЕТОНА ПРИ ЛЕЧЕНИИ СИНДРОМА МЯГКОГО КОГНИТИВНОГО СНИЖЕНИЯ АМНЕСТИЧЕСКОГО ТИПА. *Психиатрия* 73, 5–15.
38. **Гурьянова** , Швыдченко , Тамбовцева , Сергеев (2017). ИММУНОМОДУЛИРУЮЩЕЕ ВЛИЯНИЕ КАТЕХОЛАМИНОВ НА НЕЙТРОФИЛЫ. *Аллергология и иммунология* 18 (1), 53–54.
39. Laman AG, Lathe R, Shepelyakovskaya AO, Gartseva A, Brovko FA, **Guryanova S**, Alekseeva L, Meshcheryakova EA, Ivanov VT (2016). Muramyl peptides activate innate immunity conjointly via YB1 and NOD2. *Innate Immun* 22 (8), 666–673, 10.1177/1753425916668982
40. Namasivayam AA, Morales AF, Lacave ÁMF, Tallam A, Simovic B, Alfaro DG, Bobbili DR, Martin F, Androsova G, Shvydchenko I, Park J, Val Calvo J, Hoeng J, Peitsch MC, Racero MGV, Biryukov M, Talikka M, Pérez MB, Rohatgi N, Díaz-Díaz N, Mandarapu R, Ruiz RA, Davidyan S, Narayanasamy S, Boué S, **Guryanova S**, Arbas SM, Menon S, Xiang Y (2016). Community-reviewed biological network models for toxicology and drug discovery applications. *Gene Regul Syst Bio* 10, 51–66, 10.4137/GRSB.S39076
41. Kolesnikova NV, Kozlov IG, **Guryanova SV**, Kokov EA, Andronova TM (2016). Clinical and immunological efficiency of muramyl dipeptide in the treatment of atopic diseases. *Medical Immunology (Russia)* 18 (1), 15–20, 10.15789/1563-0625-2016-1-15-20
42. Nikitushkin VD, Demina GR, Shleeva MO, **Guryanova SV**, Ruggiero A, Berisio R, Kaprelyants AS (2015). A product of RpfB and RipA joint enzymatic action promotes the resuscitation of dormant mycobacteria. *FEBS J* 282 (13), 2500–2511, 10.1111/febs.13292
43. **Гурьянова СВ** (2015). Глюкозаминилмурамилдипептид и другие агонисты рецепторов врожденного иммунитета в патогенетической терапии аллергических заболеваний. (3), 74–77.
44. Boue S, Fields B, Hoeng J, Park J, Peitsch MC, Schlage WK, Talikka M, Binenbaum I, Bondarenko V, Bulgakov OV, Cherkasova V, Diaz-Diaz N, Fedorova L, **Guryanova S**, Guzova J, Igorevna Koroleva G, Kozhemyakina E, Kumar R, Lavid N, Lu Q, Menon S, Ouliel Y, Peterson SC, Prokhorov A, Sanders E,

Schrier S, Schwaitzer Neta G, Shvydchenko I, Tallam A, Villa-Fombuena G, Wu J, Yudkevich I, Zelikman M (2015). Enhancement of COPD biological networks using a web-based collaboration interface. *F1000Res* 4, 32, 10.12688/f1000research.5984.2

45. Hoeng J, Boue S, Fields B, Park J, Peitsch MC, Schlage WK, Talikka M, Binenbaum I, Bondarenko V, Bulgakov OV, Cherkasova V, Diaz-Diaz N, Fedorova L, **Guryanova S**, Guzova J, Igorevna Koroleva G, Kozhemyakina E, Kumar R, Lavid N, Lu Q, Menon S, Ouliel Y, Peterson SC, Prokhorov A, Sanders E, Schrier S, Schwaitzer Neta G, Shvydchenko I, Tallam A, Villa-Fombuena G, Wu J, Yudkevich I, Zelikman M (2015). Enhancement of COPD biological networks using a web-based collaboration interface. *F1000Res* 4, , 10.12688/f1000research.5984.1
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47. **Гурьянова СВ** (2015). Сравнительная оценка мурамил пептидов – лигандов рецепторов врожденного иммунитета в регуляции экспрессии оксида азота. (4), 453–456.
48. Kashirina EI, Reshetov PD, Alekseeva LG, Khlgatyan SV, Ryazantsev DY, Zubov VP, **Guryanova SV**, Svirshchevskaya EV (2015). Capsulation of house-dust-mite allergens into nanoparticles developed from chitosan and alginate. *Nanotechnol Russ* 10 (78), 627–635, 10.1134/S1995078015040084
49. Алесенко , **Гурьянова** , Прохоров , Шингарова (2013). Мониторинг эффективности лечения болезни Альцгеймера нейропротекторами нового поколения в эксперименте и клинике на основе тестирования уровня оксида азота, липидного спектра и антиоксидантного статуса в структурах мозга животных и эритроцитах крови челов. , 45–47.
50. Petrovskaya LE, Shingarova LN, Kryukova EA, Boldyreva EF, Yakimov SA, **Guryanova SV**, Novoseletsky VN, Dolgikh DA, Kirpichnikov MP (2012). Construction of TNF-binding proteins by grafting hypervariable regions of F10 antibody on human fibronectin domain scaffold. *Biochemistry (Mosc)* 77 (1), 62–70, 10.1134/S0006297912010075
51. Shingarova LN, Boldyreva EF, Yakimov SA, **Guryanova SV**, Dolgikh DA, Nedospasov SA, Kirpichnikov MP (2010). Novel mutants of human tumor necrosis factor with dominant-negative properties. *Biochemistry (Mosc)* 75 (12), 1458–1463, 10.1134/S0006297910120060
52. Shingarova LN, Petrovskaya LE, Nekrasov AN, Kryukova EA, Boldyreva EF, Yakimov SA, **Guryanova SV**, Dolgih DA, Kirpichnikov MP (2010). Expression and properties of human tnf peptide fragments. *Russ. J. Bioorganic Chem.* 36 (3), 301–309, 10.1134/S1068162010030040
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54. Nagurskaya EV, Zaitseva LG, Kobets NV, Kireeva IV, Bekhalo VA, Kozlov AY, Klimova RR, **Guryanova SV**, Andronova TM, Shingarova LN, Boldyreva EF, Nekrasova OV (2005). Comparative study of macrophage response in mice after DNA immunization and infection with herpes simplex virus type 1. *Bull Exp Biol Med* 140 (6), 716–719, 10.1007/s10517-006-0064-9
55. Kozlov AY, Klimova RR, Shingarova LN, Boldyreva EF, Nekrasova OV, **Guryanova SV**, Andronova TM, Novikov VV, Kushch AA (2005). Comparison of adjuvant activities of glucosaminyl-muramyl dipeptide and of the gene coding for granulocyte-macrophage colony-stimulating factor in DNA immunization against herpes simplex virus. *Mol Biol (Mosk)* 39 (3), 504–512.
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58. **Гурьянова СВ**, Андронова ТМ, Сафонова НГ (1991). Использование N-ацетилглюкозаминил-N-ацетилмурамил-L-аланил-D-изоглутамина в качестве адъюванта в иммунизации in vitro с целью получения моноклональных антител к пептиду IL-1 β (163-171). 6, 23–25..

59. Мещерякова ЕА, **Гурьянова СВ**, Макаров ЕА, Андронова ТМ, Иванов ВТ (1991). Структурно-функциональное исследование глюкозаминилмурамоилпептидов. Влияние химической модификации N-ацетилглюкозаминил-N-ацетилмурамоилдипептида на его иммуномодулирующие свойства in vivo и in vitro. 17 (9), 1157–1165..
60. **Гурьянова СВ**, Макаров ЕА, Мещерякова ЕА (1989). Иммуностимулирующие свойства ГМДП и его аналогов. 1, 297.