

## Резюме: Лукьянов Сергей Анатольевич



### Адрес

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

### Контакты

<https://www.ibch.ru/ru/users/20>

## Работа в ИБХ

2016–наст.вр.

Заведующий отделом

## Членство в советах и комиссиях ИБХ

Диссертационный совет

Ученый совет

Аттестационная комиссия

## Награды

2015	Государственная премия в области науки и техники	За разработку и внедрение комплекса технологий анализа структуры и функций сложных геномов
2006	Премии РАН имени Ю.А. Овчинникова и именная золотая медаль	За работу «Флуоресцентные белки: поиск, исследование и применение в биотехнологии»
2012	Международная премия в области нанотехнологий RUSNANOPRISE	За работу «Флуоресцентные белки: поиск, исследование и применение в биотехнологии»

## Научные интересы

Основные научные интересы С. А. Лукьянова лежат в области анализа структуры и функции геномов эукариот.

## Степени и звания

Академик

Доктор наук (Биологические науки)

## Публикации

1. Britanova OV, Lupyr KR, Staroverov DB, Shagina IA, Aleksandrov AA, Ustyugov YY, Somov DV, Klimenko A, Shostak NA, Zvyagin IV, Stepanov AV, Merzlyak EM, Davydov AN, Izraelson M, Egorov ES, Bogdanova EA, Vladimirova AK, Iakovlev PA, Fedorenko DA, Ivanov RA, Skvortsova VI, **Lukyanov S**, Chudakov DM (2023). Targeted depletion of TRBV9+ T cells as immunotherapy in a patient with ankylosing spondylitis. *Nat Med* 29 (11), 2731–2736, [10.1038/s41591-023-02613-z](https://doi.org/10.1038/s41591-023-02613-z)
2. Komech EA, Koltakova AD, Barinova AA, Minervina AA, Salnikova MA, Shmidt EI, Korotaeva TV, Loginova EY, Erdes SF, Bogdanova EA, Shugay M, **Lukyanov S**, Lebedev YB, Zvyagin IV (2022). TCR repertoire profiling revealed antigen-driven CD8+ T cell clonal groups shared in synovial fluid of patients with spondyloarthritis. *Front Immunol* 13, 973243, [10.3389/fimmu.2022.973243](https://doi.org/10.3389/fimmu.2022.973243)

3. Bryushkova EA, Skatova VD, Mutovina ZY, Zagrebneva AI, Fomina DS, Kruglova TS, Akopyan AA, Strazhesko ID, **Lukyanov SA**, Tkacheva ON, Lysenko MA, Chudakov DM (2022). Tocilizumab, netakimab, and baricitinib in patients with mild-to-moderate COVID-19: An observational study. *PLoS One* 17 (8), e0273340, [10.1371/journal.pone.0273340](https://doi.org/10.1371/journal.pone.0273340)
4. Goncharov MM, Bryushkova EA, Sharayev NI, Skatova VD, Baryshnikova AM, Sharonov GV, Karnaukhov V, Vakhitova MT, Samoylenko IV, Demidov LV, **Lukyanov S**, Chudakov DM, Serebrovskaya EO (2022). Pinpointing the tumor-specific T-cells via TCR clusters. *Elife* 11, , [10.7554/eLife.77274](https://doi.org/10.7554/eLife.77274)
5. Shelyakin PV, Lupyr KR, Egorov ES, Kofiadi IA, Staroverov DB, Kasatskaya SA, Kriukova VV, Shagina IA, Merzlyak EM, Nakonechnaya TO, Latysheva EA, Manto IA, Khaitov MR, **Lukyanov SA**, Chudakov DM, Britanova OV (2021). Naïve Regulatory T Cell Subset Is Altered in X-Linked Agammaglobulinemia. *Front Immunol* 12, 697307, [10.3389/fimmu.2021.697307](https://doi.org/10.3389/fimmu.2021.697307)
6. Izraelson M, Metsger M, Davydov AN, Shagina IA, Dronina MA, Obratsova AS, Miskevich DA, Mamedov IZ, Volchkova LN, Nakonechnaya TO, Shugay M, Bolotin DA, Staroverov DB, Sharonov GV, Kondratyuk EY, Zagaynova EV, **Lukyanov S**, Shams I, Britanova OV, Chudakov DM (2021). Distinct organization of adaptive immunity in the long-lived rodent *Spalax galili*. *Nat Aging* 1 (2), 179–189, [10.1038/s43587-021-00029-3](https://doi.org/10.1038/s43587-021-00029-3)
7. (книга) Markvicheva KN, Bogdanova EA, Staroverov DB, **Lukyanov S**, Belousov VV (2019). Imaging of Intracellular Hydrogen Peroxide Production with HyPer upon Stimulation of HeLa Cells with EGF. *Methods Mol Biol* 1990, 85–91, [10.1007/978-1-4939-9463-2\\_7](https://doi.org/10.1007/978-1-4939-9463-2_7)
8. Kotlobay AA, Sarkisyan KS, Mokrushina YA, Marcet-Houben M, Serebrovskaya EO, Markina NM, Gonzalez Somermeyer L, Gorokhovatsky AY, Vvedensky A, Purtov KV, Petushkov VN, Rodionova NS, Chepurnyh TV, Fakhranurova LI, Guglya EB, Ziganshin R, Tsarkova AS, Kaskova ZM, Shender V, Abakumov M, Abakumova TO, Povolotskaya IS, Eroshkin FM, Zarskiy AG, Mishin AS, Dolgov SV, Mitouchkina TY, Kopantzev EP, Waldenmaier HE, Oliveira AG, Oba Y, Barsova E, Bogdanova EA, Gabaldón T, Stevani CV, **Lukyanov S**, Smirnov IV, Gitelson JI, Kondrashov FA, Yampolsky IV (2018). Genetically encodable bioluminescent system from fungi. *Proc Natl Acad Sci U S A* 115 (50), 12728–12732, [10.1073/pnas.1803615115](https://doi.org/10.1073/pnas.1803615115)
9. Israelson MA, Stepanov AV, Staroverov DB, Shagina IA, Misorin AK, Schemeleva MA, Evstratieva AV, Merzlyak EM, Bogdanova EA, Britanova OV, **Lukyanov SA** (2018). Testing of monoclonal antibodies against the T-cell receptor associated with ankylosing spondylitis. *Bulletin of Russian State Medical University* 7 (5), 71–79, [10.24075/brsmu.2018.064](https://doi.org/10.24075/brsmu.2018.064)
10. Komech EA, Pogorelyy MV, Egorov ES, Britanova OV, Rebrikov DV, Bochkova AG, Shmidt EI, Shostak NA, Shugay M, **Lukyanov S**, Mamedov IZ, Lebedev YB, Chudakov DM, Zvyagin IV (2018). CD8+T cells with characteristic T cell receptor beta motif are detected in blood and expanded in synovial fluid of ankylosing spondylitis patients. *Rheumatology (Oxford)* 57 (6), 1097–1104, [10.1093/rheumatology/kex517](https://doi.org/10.1093/rheumatology/kex517)
11. Komech EA, Lebedev YB, Koshenkova AV, Syrko DS, Musatkina EA, **Lukyanov SA**, Chudakov DM, Zvyagin IV (2018). A study of the repertoire of activated T-cell clones obtained from a patient with ankylosing spondylitis. *Bulletin of Russian State Medical University* 7 (1), 65–73, [10.24075/brsmu.2018.001](https://doi.org/10.24075/brsmu.2018.001)
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13. Bozhanova NG, Baranov MS, Klementieva NV, Sarkisyan KS, Gavrikov AS, Yampolsky IV, Zagaynova EV, **Lukyanov SA**, Lukyanov KA, Mishin AS (2017). Protein labeling for live cell fluorescence microscopy with a highly photostable renewable signal. *Chem Sci* 8 (10), 7138–7142, [10.1039/c7sc01628j](https://doi.org/10.1039/c7sc01628j)
14. Shagin DA, Turchaninova MA, Shagina IA, Shugay M, Zaretsky AR, Zueva OI, Bolotin DA, **Lukyanov S**, Chudakov DM (2017). Application of nonsense-mediated primer exclusion (NOPE) for preparation of unique molecular barcoded libraries. *BMC Genomics* 18 (1), 440, [10.1186/s12864-017-3815-2](https://doi.org/10.1186/s12864-017-3815-2)
15. Shugay M, Zaretsky AR, Shagin DA, Shagina IA, Volchenkov IA, Shelenkov AA, Lebedin MY, Bagaev DV, **Lukyanov S**, Chudakov DM (2017). MAGERI: Computational pipeline for molecular-barcoded targeted resequencing. *PLoS Comput Biol* 13 (5), e1005480, [10.1371/journal.pcbi.1005480](https://doi.org/10.1371/journal.pcbi.1005480)
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22. Klementieva NV, Lukyanov KA, Markina NM, **Lukyanov SA**, Zagaynova EV, Mishin AS (2016). Green-to-red primed conversion of Dendra2 using blue and red lasers. *Chem Commun (Camb)* 52 (89), 13144–13146, [10.1039/c6cc05599k](https://doi.org/10.1039/c6cc05599k)
23. Shirmanova M, Yuzhakova D, Snopova L, Perelman G, Serebrovskaya E, Lukyanov K, Turchin I, Subochev P, **Lukyanov S**, Kamensky V, Zagaynova E (2015). Towards PDT with genetically encoded photosensitizer killerred: A comparison of continuous and pulsed laser regimens in an animal tumor model. *PLoS One* 10 (12), e0144617, [10.1371/journal.pone.0144617](https://doi.org/10.1371/journal.pone.0144617)
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28. Shirmanova MV, Druzhkova IN, Lukina MM, Matlashov ME, Belousov VV, Snopova LB, Prodanetz NN, Dudenkova VV, **Lukyanov SA**, Zagaynova EV (2015). Intracellular pH imaging in cancer cells in vitro and tumors in vivo using the new genetically encoded sensor SypHer2. *BIOCHIM BIOPHYS ACTA* 1850 (9), 1905–1911, [10.1016/j.bbagen.2015.05.001](https://doi.org/10.1016/j.bbagen.2015.05.001)
29. Bilan DS, **Lukyanov SA**, Belousov VV (2015). Genetically encoded fluorescent sensors for redox processes. *Russ. J. Bioorganic Chem.* 41 (3), 231–244, [10.1134/S106816201502003X](https://doi.org/10.1134/S106816201502003X)
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32. Билан ДС, Шохина АГ, **Лукьянов СА**, Белоусов ВВ (2015). Основные редокс-пары клетки. 41 (4), 385–402.
33. Pereverzev AP, Gurskaya NG, Ermakova GV, Kudryavtseva EI, Markina NM, Kotlobay AA, **Lukyanov SA**, Zaraksky AG, Lukyanov KA (2015). Method for quantitative analysis of nonsense-mediated mRNA decay at

- the single cell level. *Sci Rep* 5, 7729, [10.1038/srep07729](https://doi.org/10.1038/srep07729)
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  35. Shugay M, **Lukyanov S**, Chudakov DM (2015). Sequencing rare T-cell populations. *Oncotarget* 6 (37), 39393–39394, [10.18632/oncotarget.6349](https://doi.org/10.18632/oncotarget.6349)
  36. Kuznetsova DS, Shirmanova MV, Dudenkova VV, Subochev PV, Turchin IV, Zagaynova EV, **Lukyanov SA**, Shakhov BE, Kamensky VA (2015). Photobleaching and phototoxicity of KillerRed in tumor spheroids induced by continuous wave and pulsed laser illumination. *J Biophotonics* 8 (1112), 952–960, [10.1002/jbio.201400130](https://doi.org/10.1002/jbio.201400130)
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