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Образование

| | | | |
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| 2008– 2008 | Брюссель, Бельгия | Стажировка в Свободном университете Брюсселя | Моделирование структуры комплекса вазоактивного интестинального пептида (ВИП) с его рецептором. Дизайн селективной пары неорецептор-неолиганд |
| 2003– 2006 | Россия, Москва | Московский государственный университет им. М.В. Ломоносова, кафедра биоинженерии биологического факультета | Диплом кандидата физико-математических наук. Тема диссертации: «Новые подходы к молекулярному моделированию трансмембранных доменов рецепторов, действие которых опосредовано G-белками» |
| 1998– 2003 | Россия, Москва | Московский государственный университет им. М.В. Ломоносова, кафедра биофизики биологического факультета | Диплом биофизика с отличием по теме: «Молекулярное моделирование человеческих рецепторов MT1 и MT2 мелатонина» |
| 1994– 1998 | Россия, Зеленоград | ФМШ №1030 | Окончил с золотой медалью |

Работа в ИБХ

| | |
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| 2018–наст.вр. | Старший научный сотрудник |
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Членство в советах и комиссиях ИБХ

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| Ученый совет |
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Владение языками

Русский, Английский

Награды

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|------|--------------------------------|--|
| 2013 | Медаль Европейской Академии | За работу «Компьютерное моделирование структуры и функций биомембран и мембранных белков» |
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Научные интересы

Меня интересуют принципы пространственной организации белков и механизмы их сворачивания. В первую очередь это касается мембранных белков и рецепторов, таких как G-белоксопращённые рецепторы. Поскольку выбранная мной методическая сфера — это компьютерное моделирование структуры и динамики биомакромолекул, больше всего мне интересно, удастся ли когда-нибудь моделировать все эти важнейшие процессы на компьютере — без такой большой оглядки на эксперимент, которую всегда приходится делать теперь.

Степени и звания

Кандидат наук (Физико-математические науки, 03.00.02 — Биофизика)

Ссылки и контакты

<http://biomolecula.ru>

Публикации

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2. Lyukmanova EN, Zaigraev MM, Kulbatskii DS, Isaev AB, Kukushkin ID, Bychkov ML, Shulepko MA, **Chugunov AO**, Kirpichnikov MP (2023). Molecular Basis for Mambalgins-2 Interaction with Heterotrimeric α -ENaC/ASIC1a/ γ -ENaC Channels in Cancer Cells. *Toxins (Basel)* 15 (10), 612, [10.3390/toxins15100612](https://doi.org/10.3390/toxins15100612)
3. **Chugunov AO**, Dvoryakova EA, Dyuzheva MA, Simonyan TR, Tereshchenkova VF, Filippova IY, Efremov RG, Elpidina EN (2023). Fighting Celiac Disease: Improvement of pH Stability of Cathepsin L In Vitro by Computational Design. *Int J Mol Sci* 24 (15), , [10.3390/ijms241512369](https://doi.org/10.3390/ijms241512369)
4. Panina IS, Balandin SV, Tsarev AV, **Chugunov AO**, Tagaev AA, Finkina EI, Antoshina DV, Sheremeteva EV, Paramonov AS, Rickmeyer J, Bierbaum G, Efremov RG, Shenkarev ZO, Ovchinnikova TV (2023). Specific Binding of the α -Component of the Lantibiotic Lichenicidin to the Peptidoglycan Precursor Lipid II Predetermines Its Antimicrobial Activity. *Int J Mol Sci* 24 (2), 1332, [10.3390/ijms24021332](https://doi.org/10.3390/ijms24021332)
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8. Panina I, Krylov N, Gadalla MR, Aliper E, Kordyukova L, Veit M, **Chugunov A**, Efremov R (2022). Molecular Dynamics of DHHC20 Acyltransferase Suggests Principles of Lipid and Protein Substrate Selectivity. *Int J Mol Sci* 23 (9), , [10.3390/ijms23095091](https://doi.org/10.3390/ijms23095091)
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