

## Резюме: Дубовский Пётр Викторович

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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

<https://www.ibch.ru/users/427>

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### Образование

1994– 1995	Япония, Кобэ	Университет Кобэ	стажировка
1987– 1989	СССР, Москва	Институт Тонкой Химической Технологии им. Ломоносова М.В.	кандидат химических наук
1979– 1984	СССР, Москва	МИФИ	диплом с отличием

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### Работа в ИБХ

2018–наст.вр.	Старший научный сотрудник
	Научный сотрудник

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### Навыки

Владею методиками оптической (ИК-, КД-, флуоресцентная спектроскопия) и радиоспектроскопии (ЯМР, ЭПР) для изучения структуры мембраноактивных соединений, а также их взаимодействия с липидными и биомембранами. Владею навыками программирования на языке Python.

### Владение языками

русский (родной), английский (уверенный пользователь), немецкий, французский, японский (чтение и перевод со словарём)

### Научные интересы

Полипептидные токсины: структура и взаимодействие с липидными и биомембранами.

### Членство в сообществах

Член Биохимического общества СССР (затем России).

### Степени и звания

Кандидат наук (Химические науки, 02.00.10 — Биоорганическая химия)

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### Публикации

1. **Dubovskii PV**, Utkin YN (2024). Specific Amino Acid Residues in the Three Loops of Snake Cytotoxins Determine Their Membrane Activity and Provide a Rationale for a New Classification of These Toxins. *Toxins (Basel)* 16 (6), 262, [10.3390/toxins16060262](https://doi.org/10.3390/toxins16060262)
2. Dubova M, **Dubovskii V**, Utkin N, Samygina R (2024). Effect of Microgravity on the Crystallization of Cardiotoxin from the Venom of Spectacled Cobra *Naja naja*. *Cryst. Rep* 68 (6), 900–904, [10.1134/S1063774523601144](https://doi.org/10.1134/S1063774523601144)

3. Дубова КМ, **Дубовский ПВ**, Уткин ЮН, Самыгина ВР (2023). ВЛИЯНИЕ МИКРОГРАВИТАЦИИ НА КРИСТАЛЛИЗАЦИЮ КАРДИОТОКСИНА ИЗ ЯДА ОЧКОВОЙ КОБРЫ *Naja naja*. *Кристаллография* 68 (6), 902–906, [10.31857/S0023476123600465](https://doi.org/10.31857/S0023476123600465)
4. **Dubovskii PV**, Ignatova AA, Alekseeva AS, Starkov VG, Boldyrev IA, Feofanov AV, Utkin YN (2023). Membrane-Disrupting Activity of Cobra Cytotoxins Is Determined by Configuration of the N-Terminal Loop. *Toxins (Basel)* 15 (1), 6, [10.3390/toxins15010006](https://doi.org/10.3390/toxins15010006)
5. **Dubovskii PV**, Dubova KM, Bourenkov G, Starkov VG, Konshina AG, Efremov RG, Utkin YN, Samygina VR (2022). Variability in the Spatial Structure of the Central Loop in Cobra Cytotoxins Revealed by X-ray Analysis and Molecular Modeling. *Toxins (Basel)* 14 (2), , [10.3390/toxins14020149](https://doi.org/10.3390/toxins14020149)
6. Dubinnyi MA, **Dubovskii PV**, Starkov VG, Utkin YN (2021). Corrigendum to “The omega-loop of cobra cytotoxins tolerates multiple amino acid substitutions” [Biochem. Biophys. Res. Commun. 558 (2021) 141–146]. *Biochem Biophys Res Commun* 579, 188, [10.1016/j.bbrc.2021.09.077](https://doi.org/10.1016/j.bbrc.2021.09.077)
7. Dubinnyi A, **Dubovskii V**, Starkov G, Utkin N (2021). The omega-loop of cobra cytotoxins tolerates multiple amino acid substitutions. *Biochem Biophys Res Commun* 558, 141–146, [10.1016/j.bbrc.2021.04.069](https://doi.org/10.1016/j.bbrc.2021.04.069)
8. Konshina AG, **Dubovskii PV**, Efremov RG (2021). Stepwise Insertion of Cobra Cardiotoxin CT2 into a Lipid Bilayer Occurs as an Interplay of Protein and Membrane “Dynamic Molecular Portraits”. *J Chem Inf Model* 61 (1), 385–399, [10.1021/acs.jcim.0c01137](https://doi.org/10.1021/acs.jcim.0c01137)
9. **Dubovskii PV**, Ignatova AA, Feofanov AV, Utkin YN, Efremov RG (2020). Antibacterial activity of cardiotoxin-like basic polypeptide from cobra venom. *Bioorg Med Chem Lett* 30 (3), 126890, [10.1016/j.bmcl.2019.126890](https://doi.org/10.1016/j.bmcl.2019.126890)
10. **Dubovskii PV**, Efremov RG (2018). The role of hydrophobic /hydrophilic balance in the activity of structurally flexible vs rigid cytolytic polypeptides and analogues developed on their basis. *Expert Rev Proteomics* 15 (11), 873–886, [10.1080/14789450.2018.1537786](https://doi.org/10.1080/14789450.2018.1537786)
11. **Dubovskii PV**, Ignatova AA, Volynsky PE, Ivanov IA, Zhmak MN, Feofanov AV, Efremov RG (2018). Improving therapeutic potential of antibacterial spider venom peptides: coarse-grain molecular dynamics guided approach. *Future Med Chem* 10 (19), 2309–2322, [10.4155/fmc-2018-0170](https://doi.org/10.4155/fmc-2018-0170)
12. **Dubovskii PV**, Dubinnyi MA, Volynsky PE, Pustovalova YE, Konshina AG, Utkin YN, Arseniev AS, Efremov RG (2017). Impact of membrane partitioning on the spatial structure of an S-type cobra cytotoxin. *J Biomol Struct Dyn* 36 (13), 1–16, [10.1080/07391102.2017.1389662](https://doi.org/10.1080/07391102.2017.1389662)
13. Thien TV, Anh HN, Trang NTT, Trung PV, Khoa NC, Osipov AV, **Dubovskii PV**, Ivanov IA, Arseniev AS, Tsetlin VI, Utkin YN (2017). Low-molecular-weight compounds with anticoagulant activity from the scorpion *Heterometrus laoticus* venom. *Dokl Biochem Biophys* 476 (1), 316–319, [10.1134/S1607672917050052](https://doi.org/10.1134/S1607672917050052)
14. **Dubovskii PV**, Dubinnyi MA, Konshina AG, Kazakova ED, Sorokoumova GM, Ilyasova TM, Shulepko MA, Chertkova RV, Lyukmanova EN, Dolgikh DA, Arseniev AS, Efremov RG (2017). Structural and Dynamic Portraits of Recombinant and Native Cytotoxin I from *Naja oxiana*: How Close Are They? *Biochemistry* 56 (34), 4468–4477, [10.1021/acs.biochem.7b00453](https://doi.org/10.1021/acs.biochem.7b00453)
15. Thien TV, Anh HN, Trang NTT, Trung PV, Khoa NC, Osipov AV, **Dubovskii PV**, Ivanov A, Arseniev S, Tsetlin I, Utkin YN (2017). Low-Molecular Compounds with Anticoagulant Activity from Scorpion *Heterometrus laoticus* Venom. *Dokl Biochem Biophys* 476 (4), 476–479, [10.7868/S086956521728026X](https://doi.org/10.7868/S086956521728026X)
16. Shulepko MA, Lyukmanova EN, Shenkarev ZO, **Dubovskii PV**, Astapova MV, Feofanov AV, Arseniev AS, Utkin YN, Kirpichnikov MP, Dolgikh DA (2017). Towards universal approach for bacterial production of three-finger Ly6/uPAR proteins: Case study of cytotoxin I from cobra *N. oxiana*. *Protein Expr Purif* 130, 13–20, [10.1016/j.pep.2016.09.021](https://doi.org/10.1016/j.pep.2016.09.021)
17. **Dubovskii PV**, Vassilevski AA, Kozlov SA, Feofanov AV, Grishin EV, Efremov RG (2015). Latarcins: Versatile spider venom peptides. *Cell Mol Life Sci* 72 (23), 4501–4522, [10.1007/s00018-015-2016-x](https://doi.org/10.1007/s00018-015-2016-x)
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19. **Dubovskii PV**, Vorontsova OV, Utkin YN, Arseniev AS, Efremov RG, Feofanov AV (2015). Cobra cytotoxins: Determinants of antibacterial activity. *MENDELEEV COMMUN* 25 (1), 70–71, [10.1016/j.mencom.2015.01.026](https://doi.org/10.1016/j.mencom.2015.01.026)
20. **Дубовский ПВ**, Уткин ЮН (2014). Цитотоксины кобр: структурная организация и антибактериальная активность. *Acta Naturae* 6 (3), 12–19.
21. Кузнецов АС, **Дубовский ПВ**, Воронцова ОВ, Феофанов АВ, Ефремов РГ (2014). Взаимодействие линейных катионных пептидов с фосфолипидными мембранами и полимерами сиаловой кислоты.

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22. Babailov SP, **Dubovskii PV**, Zapolotsky EN (2014). Paramagnetic lanthanides as magnetic resonance thermo-sensors and probes of molecular dynamics: Holmium-DOTA complex. *Polyhedron* 79, 277–283, [10.1016/j.poly.2014.04.067](https://doi.org/10.1016/j.poly.2014.04.067)
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- Torpedo californica Acetylcholine Receptor: Preparation in Escherichia coli and 19F NMR Study. *Russ. J. Bioorganic Chem.* 29 (4), 351–357, [10.1023/A:1024997017191](https://doi.org/10.1023/A:1024997017191)
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