

Gita G. Paskerova

ResearcherID: H-3805-2014

ScopusID: 6506637976

ORCID: 0000-0002-1026-4216

Web-pages:

<http://zoology.bio.spbu.ru/Eng/People/Staff/paskerova.php>

<http://mbs.spbu.ru/en/science/sprozoans-apicomplexa-sporozoa-and-their-hyperparasites/>

General research interests: marine fauna; parasites, protists; host-parasite relationships on molecular, cellular and tissue levels; light and electron microscopy.

Latest research activities:

Evolutionary trends of early emerging apicomplexans (Alveolata: Apicomplexa): ultrastructural and biological data. Fine structure and life cycle of metchnikovellids (Metchnikovellidae) in the context of putative evolutionary history of Microsporidia.

Morphology and taxonomy of henricias (Echinodermata: Asteroidea: Henricia) of the White Sea.

Courses:

1. “Zoological Video-Excursions” (lectures and video presentations, 26 hours), for the undergraduate students;
2. “Echinodermata” (lectures and practical works, 18 hours), for the undergraduate students;
3. “Ctenophora” (lectures and practical works, 8 hours), for the undergraduate students;
4. “Deuterostomia” (lectures and practical works, 6 hours), for the undergraduate students;
5. “Parasitic protists” (lectures and practical works, 48 hours), for the Master students.
6. Practical course “Zoology of Invertebrates» (practical works – 64 hours) – for the undergraduate students.
7. Summer practice «Zoology of Invertebrates» (White Sea Marine Station or Peterhoff (Petrodvorets), St Petersburg, 2 weeks), for the undergraduate students.

Peer-reviewed scientific articles

1. Dolgikh V.V., Nasonova E.S., Paskerova G.G. 1996. Activities of enzymes of carbohydrate and energetic metabolism in spores of the microsporidia *Nosema grylli*. *Parazitologiya*, vol.30, (2): 178-181 [in Russian; English summary].
https://www.zin.ru/journals/parazitologiya/content/2002/prz_2002_6_6_Dolgikh.pdf
2. Paskerova G.G. 1996. *Urceolaria kozloffii*, an ectocommencal of the brachiopod *Hemithyris psittacea* from the White Sea. *Parazitologiya*, vol.30, (3): 236-243 [in Russian; English summary].
https://www.zin.ru/journals/parazitologiya/content/1996/prz_1996_3_6_Paskerova.pdf
3. Paskerova G.G., Sokolova Yu.Ya., Dobrovolsky (Dobrovolskij) A.A. 1998. Peculiarities of pathogenesis of a fat body in the cricket *Gryllus bimaculatus* (Gryllidae) infected with *Adelina grylli* (Sporozoa: Adeleina). *Parazitologiya*. Vol.32 (5): 457-463 [in Russian; English summary].
https://www.zin.ru/journals/parazitologiya/content/1998/prz_1998_5_8_Paskerova.pdf
4. Dyakin A.Yu., Paskerova G.G. 2004. *Urospora chiridotae* (Sporozoa: Gregarinomorpha: Eugregarinida) - a neogamic parasite of sea cucumber *Chiridota laevis* (Echinodermata: Holothuroidea: Apoda). *Parazitologiya*. Vol.38 (3): 225-238 [in Russian with English summary].
https://www.zin.ru/Journals/parazitologiya/content/2004/prz_2004_3_3_Dyakin.pdf
5. Butaeva F., Paskerova G., Entzeroth R. 2006. *Dirypanocystis* sp. (Apicomplexa, Gregarina, Selenidiidae): the mode of survival in the gut of *Enchytraeus albidus* (Annelida, Oligochaeta, Enchytraeidae) is close to that of the coccidian genus *Gryptosporidium*. *Tsitologiya*. Vol.48 (8): 695-704 [in English].
http://www.tsitologiya.cytspb.rssi.ru/48_8/butaeva.pdf
6. Sokolova Yu.Ya., Paskerova G.G., Rotari Yu.M., Nasonova E.S., Smirnov A.V. 2013. Fine structure of *Metchnikovella incurvata* Caullery and Mesnil 1914 (microsporidia), a hyperparasite of gregarines *Polyrhabdina* sp. from the polychaete *Pygospio elegans*. *Parasitology*. Vol.140: 855–867 [in English]. doi:10.1017/S0031182013000036.
7. Sokolova Yu.Ya., Paskerova G.G., Rotari Yu.M., Nasonova E.S., Smirnov A.V. 2014. Description of *Metchnikovella spiralis* sp. n. (Microsporidia: Metchnikovellidae), with notes on the ultrastructure of metchnikovellids. *Parasitology*, 141, pp 1108-1122. doi:10.1017/S0031182014000420.

8. Rotari Yu.M., Paskerova G.G., Sokolova Yu.Ya. 2015. Diversity of metchnikovellids (Metchnikovellidae, Rudimicrosporea), hyperparasites of bristle worms (Annelida, Polychaeta) from the White Sea. *Protistology*. Vol. 9 (1): 50-59.
http://protistology.ifmo.ru/num9_1/sokolova_protistology9-1.pdf
9. Valigurová A., Paskerova G.G., Diakin A., Kováčiková M., Simdyanov T.G. 2015. Protococcidian *Eleutheroschizon duboscqi*, an unusual apicomplexan interconnecting gregarines and cryptosporidia. *PLoS ONE* 10(4): e0125063. doi:10.1371/journal.pone.0125063.
10. Diakin A., Paskerova G.G., Simdyanov T.G., Aleoshin V.V., Valigurová A. 2016. Morphology and molecular phylogeny of coelomic gregarines (Apicomplexa) with different types of motility: *Urospora ovalis* and *U. travisiae* from the polychaete *Travisia forbesii*. *Protist*. Vol. 167 (June 2016): 279-301. doi: 10.1016/j.protis.2016.05.001.
11. Paskerova G.G., Frolova E.V., Kováčiková M., Panfilkina T.S., Mesentsev E.S., Smirnov A.V., Nassonova E.S. 2016. *Metchnikovella dogieli* sp. n. (Microsporidia: Metchnikovellida), a parasite of archigregarines *Selenidium* sp. from polychaetes *Pygospio elegans*. *Protistology*, 10 (4): 148-157. doi:10.21685/1680-0826-2016-10-4-4.
12. Valigurová A., Vaškovicová N., Diakin A., Paskerova G.G., Simdyanov T.G., Kováčiková M. 2017. Motility in blastogregarines (Apicomplexa): Native and drug-induced organisation of *Siedleckia nematoides* cytoskeletal elements. *PLoS ONE* 12 (6): e0179709. <https://doi.org/10.1371/journal.pone.0179709>.
13. Bratova O., Paskerova G.G. 2018. *Henricia* spp. (Echinodermata: Asteroidea: Echinasteridae) of the White Sea: morphology, morphometry and synonymy. *Can. J. Zool.* 96 (4): 341–355. [dx.doi.org/10.1139/cjz-2017-0072](https://doi.org/10.1139/cjz-2017-0072).
14. Simdyanov T.G., Paskerova G.G., Valigurová A., Diakin A., Kováčiková M., Schrével J., Guillou L., Dobrovolskij A.A., Aleoshin V.V. 2018. First ultrastructural and molecular phylogenetic evidence from the blastogregarines, an early branching lineage of plesiomorphic Apicomplexa. *Protist*. 169(5): 697–726. 10.1016/j.protis.2018.04.006.
15. Galindo L.J., Torruella G., Moreira D., Timpano H., Paskerova G., Smirnov A., Nassonova E., López-García P. 2018. Evolutionary genomics of *Metchnikovella incurvata* (Metchnikovellidae), an early branching microsporidium. *Genome Biol. Evol.* 10(10): 2736–2748. doi:10.1093/gbe/evy205.
16. Paskerova G.G., Miroljubova (Panfilkina) T.S., Diakin A., Kováčiková M., Valigurová A., Guillou L., Aleoshin V.V., Simdyanov T.G. 2018. Fine structure and Molecular Phylogenetic Position of Two Marine Gregarines, *Selenidium pygospionis* sp. n. and *S. pherusa* sp. n., with Notes on the Phylogeny of Archigregarinida. *Protist* 169(6): 826-852. 10.1016/j.protis.2018.06.004.
17. Kováčiková M., Paskerova G.G., Diakin A., Simdyanov T.G., Vaškovicová N., Valigurová A. 2019. Motility and cytoskeletal organisation in the archigregarine *Selenidium pygospionis* (Apicomplexa): observations on native and experimentally affected parasites. *Parasitology Research* 118(9): 2651-2667. doi: 10.1007/s00436-019-06381-z.
18. Janouškovec J., Paskerova G.G., Miroljubova (Panfilkina) T.S., Mikhailov K.V., Birley T., Aleoshin V.V., Simdyanov T.G. 2019. Apicomplexan-like parasites are polyphyletic and widely but selectively dependent on cryptic plastid organelles. *eLife* 8: 49662. <https://doi.org/10.7554/eLife.49662>
19. Miroljubova (Panfilkina) T.S., Simdyanov T.G., Mikhailov K.V., Aleoshin V.V., Janouškovec J., Belova P.A., Paskerova G.G. 2020. Polyphyletic origin, intracellular invasion, and meiotic genes in the putatively asexual agamococcidians (Apicomplexa *incertae sedis*). *Scientific Reports*. 10: 1-17. 10:15847. <https://doi.org/10.1038/s41598-020-72287-x>
20. Karpov Sergey A., Paskerova Gita G. 2020. The apheids, intracellular parasitoids of algae, consume host cytoplasm “from the inside”. *Protistology* 14 (4): 258–263. Doi: 10.21685/1680-0826-2020-14-4-7.
21. Nassonova E., Bondarenko N., Paskerova G., Kováčiková M., Frolova E., Smirnov A. 2021. Evolutionary relationships of *Metchnikovella dogieli* Paskerova et al., 2016 (Microsporidia: Metchnikovellidae) revealed by multigene phylogenetic analysis. *Parasitology Research* 120: 525–534. Doi:10.1007/s00436-020-06976-x.
22. Михайлов К.В., Насонова Е.С., Шишкин Е.А., Паскерова Г.Г., Симдянов Т.Г., Юдина В.А., Смирнов А.В., Янушковец Я., Алешин В.В. 2021. Рибосомная РНК мечниковеллид в транскриптомах гregarин и рДНК микроспоридий *sensu lato* в метаженомах. *Журнал Общей биологии* 82 (3): 201-228, 10.31857/S0044459621030040 [in Russian with English Summary; translated in English in: Mikhailov K.V., Nassonova E.S., Shishkin Y.A., Paskerova G.G., Simdyanov T.G., Yudina V.A., Smirnov A.V., Janouškovec J., and Aleoshin V.V. 2022. Ribosomal RNA of metchnikovellids in gregarine transcriptomes and rDNA of microsporidia *sensu lato* in metagenomes. *Biology Bulletin Reviews* 12(3): 213-239, 10.1134/S2079086422030069].
23. Frolova E.V., Paskerova G.G., Smirnov A.V., Nassonova E.S. 2021. Molecular phylogeny and new light microscopic data of *Metchnikovella spiralis* (Microsporidia: Metchnikovellidae), a hyperparasite of eugregarine

- Polyrhabdina* sp. from the polychaete *Pygospio elegans*. Parasitology. 148: 779–786. Doi: 10.1017/S0031182021000603.
24. Paskerova G.G., Miroljubova T.S., Valigurová A., Janouškovec J., Kováčiková M., Diakin A., Sokolova Y.Y., Mikhailov K.V., Aleoshin V.V., Simdyanov T.G. 2021. Evidence from the resurrected family Polyrhabdinidae Kamm, Apicomplexa: Gregarinomorpha) supports the epimerite, an attachment organelle, as a major eugregarine innovation. PeerJ 9: e11912. DOI: 10.7717/peerj.11912.
 25. Frolova E.V., Paskerova G.G., Smirnov A.V., Nasonova E.S. 2022. *Metchnikovella dobrovolskiji* sp. nov. (Microsporidia: Metchnikovellida), a parasite of archigregarines *Selenidium pygospionis* from the polychaete *Pygospio elegans*. Protistology, 16(3): 226–235. doi:10.21685/1680-0826-2022-16-3-7.
 26. Frolova E.V., Paskerova G.G., Smirnov A.V., Nasonova E.S. 2023. Diversity, distribution, and development of hyperparasitic microsporidia in gregarines within one super-host. *Microorganisms* 11(1):152. <https://doi.org/10.3390/microorganisms11010152>.
 27. Paskerova G.G., Miroljubova T.S., Valigurová A., Aleoshin V.V., Simdyanov T.G. 2023. Morphological and Phylogenetic Study of Protococcidians Sheds Light on the Evolution of Epicellular Parasitism in Sporozoa (Apicomplexa), with the Description of *Eleutheroschizon planoratum* sp. nov. *Diversity*, 15(7), 863. <https://doi.org/10.3390/d15070863>.
 28. Valigurová A., Diakin A., Seifertová M., Vaškovicová N., Kováčiková M., Paskerova G.G. 2023. Dispersal and invasive stages of *Urospora* eugregarines (Apicomplexa) from brown bodies of a polychaete host. *Journal of Invertebrate Pathology*, 201, 107997. <https://doi.org/10.1016/j.jip.2023.107997>
 29. Frolova E.V., Raiko M.P., Bondarenko N.I., Paskerova G.G., Simdyanov T.G., Smirnov A.V., Nasonova E.S. 2023. *Mesnilia trivisiae* gen. nov., sp. nov. (Microsporidia: Metchnikovellida), a parasite of archigregarines *Selenidium* sp. from the polychaete *Trivisia forbesii*: morphology, molecular phylogeny and phylogenomics. *Protistology* 17 (4): 244–258. doi:10.21685/1680-0826-2023-17-4-5

Non-refereed scientific articles

Conference paper

1. Nasonova E., Moreira D., Torruella G., Timpano H., Paskerova G., Smirnov A., Lopez-Garcia P. Phylogenomic insights on the evolution of metchnikovellids. Moscow Forum “Protist-2016”. 6-10 June, Moscow, Russia. // *Protistology*, 2016. Vol.10, N 2. P.52 [in English].
2. Panfilkina Tatiana S., Simdyanov Timur G., Aleoshin Vladimir V., Paskerova Gita G. Agamococcidians: coccidians or gregarines? New species and new data on the phylogenetic position of the group // Moscow Forum “Protist-2016”. 6-10 June, Moscow, Russia. // *Protistology*, 2016. Vol. 10, N 2. P. 56-57 [in English].
3. Panfilkina T.S., Paskerova G.G., Simdyanov T.G., Aleoshin V.V. 2016. New Members and Phylogenetic Position of Agamococcidians (Apicomplexa: Agamococcidiorida). *Contemporary Problems of Theoretical and Marine Parasitology*. Sevastopol, 2016. Collection of Scientific Papers, p.49-50 [in Russian, English Abstract]. ISBN 978-5-9908633-2-3.
4. Denisova S.A., Paskerova G.G. Biological Features of *Alveocystis intestinalis* (Coccidia): A Brief Review. 2016. *Contemporary Problems of Theoretical and Marine Parasitology*. Sevastopol, 2016. Collection of Scientific Papers, p.71-72 [in Russian, English Abstract]. ISBN 978-5-9908633-2-3.
5. Panfilkina T.S., Paskerova G.G. Agamococcidians (Apicomplexa: Agamococcidiorida) of the White Sea. 2016. *Scientific papers of the Centre of Parasitology*. Vol.49: Fauna and Ecology of parasites. P.71-72 [in Russian]. ISSN 0568-5524.
6. Frolova, E.V.; Paskerova, G.G.; Smirnov, A.V.; Nasonova, E.S. Diversity, Distribution and Development of Hyperparasitic Microsporidia in Gregarines within One Super-host. Preprints 2022, 2022120236 (doi: 10.20944/preprints202212.0236.v1).