

CURRICULUM VITAE

Telnova (Vinnik) Valeriya



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Affiliation: engineer of the laboratory of “Smart sleep”

Saratov State University, 410012, Astrakhanskaya str., 83, Saratov, Russia.

engineer of “Symbiosis” laboratory

Institute of Biochemistry and Physiology of Plants and Microorganisms, Russian Academy of Sciences (IBPPM RAS), 410049, Prospekt Entuziastov, 13, Saratov, Russia

Education

2017-2021

Saratov State University

Biology Faculty

Department of Biochemistry and Biophysics

Bachelor’s degree

CuInS₂ quantum dots as photoactive agents for antimicrobial PDT
(Diploma with honours)

2017-2020

Saratov State Technical University

Faculty of International communication

Bachelor’s degree: Interpreter in professional interaction (English)
(Diploma with honours)

2021-2023

Saratov State University

Department of Human and Animal Physiology

Master Degree

(Diploma with honours)

Research interests

The cerebral lymphatic system; brain cancer treatment; brain drug delivery; physiology of sleep; cell development

Employment

2019 - current	Saratov State University "Smart Sleep" laboratory Lab engineer Participation in RFBR, RSCF grants Preparation and immunohistochemical analysis of human, mouse, and rat brain samples for confocal visualization. Brain drug delivery. Brain sample preparation for electron microscopy. Material preparation and writing of articles for English-language publications.
2021 - current	IBPPM RAS “Symbiosis” laboratory Lab engineer Growth of cell cultures, obtaining fluorescence lines of cell cultures, analysis of vital activity; lifetime cell dyeing and microscopy
2023-current	Saratov State University Department of animal and human physiology Chair assistant Conducting laboratory, practical, and seminar classes for students of the Faculty of Biology

Hard skills

- Work with cell cultures
- Immunohistochemical analysis
- Work on vibratome (ultra-sectioning, cryo-sectioning, vibra-sectioning)
- Sample preparation for electron microscopy
- Article writing
- ImageJ

Soft skills

- Responsibility, fast learning, teamwork, communication, creativity, highly motivated

Language skills

Diploma of Russian-English interpreter

English – C1 (Advanced)

Scientific achievements

2021	Participation in the I winter school On-line School on “Brain Clearance Meets Complex Systems” 1 place in theses competition Saratov, Russia
2021	participation in the II international and XIII regional scientific conference “Research of young scientists in biology and ecology” Saratov, Russia
2021	participation in the international scientific conference of students, postgraduates and young scientists "Lomonosov-2021" Moscow, Russia
2020	participation in VII school-conference on “Physiology and Pathology of Blood Circulation” 1 place in theses competition Moscow, Russia
2019	participation in International Conference “Current Trends in History, Culture, Science and Technology” Saratov, Russia
2019	participation in the annual All-Russian school-seminar “Methods of computer diagnostics in biology and medicine” Saratov, Russia
2019	participation in the V summer school “Photonics meets biology” 3 place in theses competition Heraklion, Greece

Main publications

1. **V. Telnova**, A. Dubrovsky, A. Terskov, A. Tsven, O. Semyachkina-Glushkovskaya, V. Tuchin. Photodynamic Therapy of Brain Diseases. Springer Nature Singapore Pte Ltd. 2022 N. Mazumder et al. (eds.), Advances in Brain Imaging Techniques,
2. Semyachkina-Glushkovskaya, O.; Penzel, T.; Blokhina, I.; Khorovodov, A.; Fedosov, I.; Yu, T.; Karandin, G.; Evsukova, A.; Elovenko, D.; Adushkina, V.; Shirokov, A.; Dubrovskii, A.; Terskov, A.; Navolokin, N.; Tzoy, M.; Ageev, V.; Agranovich, I.; **Telnova, V.**; Tsven, A.; Kurths, J. Night photostimulation of clearance of beta-amyloid from mouse brain: New strategies in preventing Alzheimer’s disease. Cells 2021, 10, 3289.
3. Semyachkina-Glushkovskaya, O.; Shirokov, A.; Blokhina, I.; Fedosov, I.; Terskov, A.; Dubrovsky, A.; Tsoy, M.; Zlatogorskaya, D.; Adushkina, V.; Evsukova, A.; **Telnova, V.**; Tzven, A.; Krupnova, V.; Manzhaeva, M.; Dmitrenko, A.; Penzel, T.; Kurths, J.

- Mechanisms of phototherapy of Alzheimer's disease during sleep and wakefulness: the role of the meningeal lymphatics. *Front Optoelectron* 2023, 16, 22.
4. Semyachkina-Glushkovskaya, O.; Sokolovski, S.; Fedosov, I.; Shirokov, A.; Navolokin, N.; Bucharaskaya, A.; Blokhina, I.; Terskov, A.; Dubrovski, A.; **Telnova, V.**; Tzven, A.; Tzoy, M.; Evsukova, A.; Zhlatogorskaya, D.; Adushkina, V.; Dmitrenko, A.; Manzhaeva, M.; Krupnova, V.; Noghero, A.; Bragin, D.; Bragina, O.; Borisova, E.; Kurths, J.; Rafailov, E. Transcranial photosensitizer-free laser treatment of glioblastoma in rat brain. *Int J Mol Sci* 2023, 24, 13696.
 5. Semyachkina-Glushkovskaya, O.; Shirokov, A.; Blokhina, I.; **Telnova, V.**; Vodovozova, E.; Alekseeva, A.; Boldyrev, I.; Fedosov, I.; Dubrovsky, A.; Khorovodov, A.; Terskov, A.; Evsukova, A.; Elovenko, D.; Adushkina, V.; Tzoy, M.; Agranovich, I.; Kurth, J.; Rafailov, E. Intranasal delivery of liposomes to glioblastoma by photostimulation of the lymphatic system. *Pharmaceutics* 2023, 15, 36.
 6. Semyachkina-Glushkovskaya, O.; Diduk, S.; Eroshova, A.; Dosadina, E.; Kruglov, A.; Khorovodov, A.; Shirokov, A.; Fedosov, I.; Dubrovsky, A.; Blokhina, I.; Terskov, A.; Karandin, G.; Evsukova, A.; Tsven, A.; **Telnova, V.**; Afranovich, I.; Sokolovski, S.; Rafailov, E.; Kurths, J. Photomodulation of lymphatic delivery of Bevacizumab to the brain: The role of singlet oxygen. *Adv Exp Med Biol* 2022, 1395, 53-57.
 7. Semyachkina-Glushkovskaya, O.; Shirokov, A.; Blokhina, I.; **Telnova, V.**; Vodovozova, E.; Alekseeva, A.; Boldyrev, I.; Fedosov, I.; Dubrovsky, A.; Khorovodov, A.; Terskov, A.; Evsukova, A.; Elovenko, D.; Adushkina, V.; Tzoy, M.; Agranovich, I.; Kurth, J.; Rafailov, E. Intranasal delivery of liposomes to glioblastoma by photostimulation of the lymphatic system. *Pharmaceutics* 2023, 15, 36.
 8. Semyachkina-Glushkovskaya, O.; Bragin, D.; Bragina, O.; Socolovski, S.; Shirokov, A.; Fedosov, I.; Ageev, V.; Blokhina, I.; Dubrovsky, A.; **Telnova, V.**; Terskov, A.; Khorovodov, A.; Elovenko, D.; Evsukova, A.; Zhoy, M.; Agranovich, I.; Vodovozova, E.; Alekseeva, A.; Kurths, J.; Rafailov, E. Low-level laser treatment induces the blood-brain barrier opening and the brain drainage system activation: Delivery of liposomes into mouse glioblastoma. *Pharmaceutics* 2023, 15, 567.
 9. Semyachkina-Glushkovskaya, O.; Fedosov, I.; Zaikin, A.; Ageev, V.; Ilyukov, E.; Myagkov, D.; Tuktarov, D.; Blokhina, I.; Shirokov, A.; Terskov, A.; Zlatogorskaya, D.; Adushkina, V.; Evsukova, A.; Dubrovsky, A.; Tsoy, M.; **Telnova, V.**; Manzhaeva, M.; Dmitrenko, A.; Krupnova, V.; Kurths, J. Technology of the photobiostimulation of the brain's drainage system during sleep for improvement of learning and memory in male mice. *Biomed Opt Express* 2024, 15, 44-58.
 10. Semyachkina-Glushkovskaya, O.; Klimova, M.; Iskra, T.; Bragin, D.; Abdurashitov, A.; Dubrovsky, A.; Khorovodov, A.; Terskov, A.; Blokhina, I.; Lezhnev, N.; **Vinnik, V.**; I. Agranovich, I.; Mamedova, A.; Shirokov, A.; Navolokin, N.; Khlebsov, B.; Tuchin, V.; Kurths, J. Transcranial photobiomodulation of clearance of beta-amyloid from the mouse brain: Effects on the meningeal lymphatic drainage and blood oxygen saturation of the brain. *Adv Exp Med Biol* 2021, 1269, 57-61.
 11. Semyachkina-Glushkovskaya, O.; Abdurashitov, A.; Dubrovsky, A.; Klimova, M.; Agranovich, I.; Terskov, A.; Shirokov, A.; **Vinnik, V.**; Kuznecova, A.; Lezhnev, N.; Blokhina, I.; Shnitenkova, A.; Tuchin, V.; Rafailov, E.; Kurths, J. Photobiomodulation of lymphatic drainage and clearance: Perspective strategy for augmentation of meningeal lymphatic functions. *Biomed Opt Express* 2020, 11, 725-734.
 12. Semyachkina-Glushkovskaya, O.; Abdurashitov, A.; Klimova, M.; Dubrovsky, A.; Shirokov, A.; Fomin, A.; Terskov, A.; Agranovich, I.; Mamedova, A.; Khorovodov, A.;

- Vinnik, V.**; Blokhina, I.; Lezhnev, N.; Shareef, A.E.; Kuzmina, A.; Sokolovski, S.; Tuchin, V.; Rafailov, E.; Kurths, J. Photostimulation of cerebral and peripheral lymphatic functions. *Transl Biophotonics* 2020, 2, e201900036.
13. Semyachkina-Glushkovskaya, O.; Fedosov, I.; Shirokov, A.; Vodovozova, E.; Alekseeva, A.; Khorovodov, A.; Blokhina, I.; Terskov, A.; Mamedova, A.; Klimova, M.; Dubrovsky, A.; Ageev, V.; Agranovich, I; **Vinnik, V.**; Tsven, A.; Sokolovski, S.; Rafailov, E.; Penzel T.; Kurths, J. Photomodulation of lymphatic delivery of liposomes to the brain bypassing the blood-brain barrier: New perspectives for glioma therapy. *Nanophotonics* 2021, 12, 3215-3227.
14. Oana Semyachkina-Glushkovskaya, O.; Bragin, D.; Fedosov, I.; Blokhina, I.; Khorovodov, A.; Terskov, A.; Shirokov, A.; Dubrovsky, A.; **Vinnik, V.**; Evsukova, A.; Elovenko, D.; Adushkina, V.; Tzoy, M.; Dmitrenko, A.; Krupnova, V.; Manzhaeva, M.; Agranovich, I.; Saranceva, E.; Iskra, T.; Lykova, E.; Sokolovski, S.; Rafailov, E.; Jürgen Kurths, J. Mechanisms of photostimulation of brain's waste disposal system: The role of singlet oxygen. In: Scholkmann, Oxygen Transport to Tissue XLIV. ISOTT 2022.; LaManna, J.; Wolf, U. Eds.; Springer: Germany, 2023; 1438.