


BIOGRAPHICAL SKETCH

NAME Alla B. Bucharskaya, PhD	POSITION TITLE Head of Department, Scientific Research Institute of Fundamental and Clinic Uronephrology	
Institutional affiliation Saratov State Medical University n.a.V.I.Razumovsky, 112 B.Kazachya str., Saratov, 410012 Russia		

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	MM/YY	FIELD OF STUDY
Saratov State University, Saratov, Russia	MS	July 1994	Biological Faculty
Saratov State University, Saratov, Russia	PhD	March 1998	Pathology, Oncology and Morphology of Animals

A. Personal Statement

My fields of expertise are cytology, morphology and experimental oncology, biophysics, biochemistry, biomedical optics, nanobiophotonics and imaging in biomedicine. I am an author of more than **10** patents of Russian Federation, author of more than **50** peer-reviewed papers. My h-index is **11** (in Scopus and WoS). I am a member of Association of Clinic Cytologists. I am also a participant of SPIE International conferences. I am Head of Department (Centre of Collective Use) in Scientific Research Institute of Fundamental and Clinic Uronephrology of Saratov State Medical University (since **2010** to present).

B. Positions and Honors

1994–2004 Cytologist in Regional children's clinical hospital IN Saratov.
2004–2007 Junior scientist in Central scientific Laboratory of Saratov State Medical University
2007–2010 Research scientist in Scientific Research Institute of Fundamental and Clinic Uronephrology of Saratov State Medical University
2010-currently Head of Department (Centre of Collective Use) in Scientific Research Institute of Fundamental and Clinic Uronephrology of Saratov State Medical University n.a.V.I.Razumovsky
2013-currently Deputy director of Scientific Research Institute of Fundamental and Clinic Uronephrology of Saratov State Medical University n.a.V.I.Razumovsky
2021-currently Deputy director of Scientific Medical Centre Saratov State University n.a.N.G. Chernyshevsky.

C. Selected Peer-reviewed Publications

1. Terentyuk G.S., Panfilova E.V., Khanadeev V. A., Chumakov D.S., Genina E.A., Bashkatov A.N., Tuchin V.V., Bucharskaya A.B., Maslyakova G.N., Khlebtsov N.G., Khlebtsov B.N. Gold nanorods with a

- hematoporphyrin-loaded silica shell for dual-modality photodynamic and photothermal treatment of tumors in vivo//Nano Research. 2014. 1. p.1-13.DOI 10.1007/s12274-013-0398-3.
2. Bucharskaya A.B., Maslyakova G.N., Afanasyeva G.A., Terentyuk G.S., Navolokin N.A., Zlobina O.V., Chumakov D.S., Bashkatov A.N., Genina E.A., Khlebtsov N.G., Khlebtsov B.N., Tuchin V.V. The morpho-functional assessment of plasmonic photothermal therapy effects on transplanted liver tumor Journal of Innovative Optical Health Sciences. 2015; 8(3):1541004. DOI:10.1142/S1793545815410047
 3. German S.V., Navolokin N.A., Kuznetsova N.R., Zuev V.V., Inozemtseva O.A., Anis A.A., Volkova E.K., Bucharskaya A.B., Maslyakova G.N., Fakhrullin R.F., Terentyuk G.S., Vodovozova E.L., Gorin D.A. Liposomes Loaded with Hydrophilic Magnetite Nanoparticles: Preparation and Application as Contrast Agents for Magnetic Resonance Imaging. Colloids and Surfaces B: Biointerfaces. 2015. 135, 109-115. DOI: 10.1016/j.colsurfb.2015.07.042
 4. Bucharskaya A.B., Maslyakova G.N., Pakhomy S.S., Zlobina O.V., Bugaeva I.O., Navolokin N.A., Khlebtsov B.N., Bogatyrev V.A., Khlebtsov N.G., Tuchin V.V. The morphological changes in the internal organs of laboratory animals after prolonged oral administration of gold nanoparticles. Journal of Innovative Optical Health Sciences. 2016. Vol.9. No.4. 1642004. doi:10.1142/S1793545816420049
 5. Bucharskaya A.B., Pakhomy S.S., Zlobina O.V. et al. Alterations of morphology of lymphoid organs and peripheral blood indicators under the influence of gold nanoparticles in rats. Journal of Innovative Optical Health Sciences. 2016, 9(1), 1640004. Doi: 10.1142/S1793545816400046
 6. Bucharskaya A.B., Maslyakova G.N., Dikht N.I., Navolokin N.A., Terentyuk G.S., Bashkatov A.N., Genina E.A., Tuchin V.V., Khlebtsov B.N., Khlebtsov N.G. Cancer cell damage at laser-induced plasmon-resonant photothermal treatment of transplanted liver tumor. BioNanoScience. 2016. Vol.6., No.3. p. 256-260. Doi: 10.1007/s12668-016-0211-3
 7. Bucharskaya A., Maslyakova G., Terentyuk G., Yakunin A., Avetisyan Y., Bibikova O., Tuchina E., Khlebtsov B., Khlebtsov N., Tuchin V. Towards effective photothermal/ photodynamic treatment using plasmonic gold nanoparticles. International Journal of Molecular Sciences. 2016. Vol.17. No. 8. Article number 1295. DOI: 10.3390/ijms17081295
 8. Bucharskaya A.B., Maslyakova G.N., Dikht N.I. et al. Plasmonic photothermal therapy of transplanted tumors in rats at multiple intravenous injection of gold nanorods. BioNanoScience. 2017, 7(1), 216-221. Doi:10.1007/s12668-016-0320-z
 9. A.B. Bucharskaya, G.N. Maslyakova, M.L. Chekhonatskaya, G.S. Terentyuk, N.A. Navolokin, B.N. Khlebtsov, N.G. Khlebtsov, A.N. Bashkatov A.N., E.A. Genina, V.V. Tuchin Plasmonic Photothermal Therapy: Approaches to Advanced Strategy. Lasers in Surgery and Medicine. 2018. 50(10). 1025-1033. DOI: 10.1002/lsm.23001
 10. Navolokin N.A., German S.V., Bucharskaya A.B., Godage O.S., Zuev V.V., Maslyakova G.N., Pyataev N.A., Zamyshliaev P.S., Zharkov M.N., Terentyuk G.S., Gorin D.A., Sukhorukov G.B. Systemic Administration of Polyelectrolyte Microcapsules: Where do they accumulate and when? In vivo and ex vivo study. Nanomaterials. 2018. 8 (10).p. 812. DOI: 10.3390/nano8100812

D. Research Support

1. Government of the Russian Federation (grant No 14.Z50.31.0004 to support scientific research projects implemented under the supervision of leading scientists at Russian institutions and Russian institutions of higher education) 2014-2016.
2. Grant No. 14-13-01167 "Gold and assemble composite nanoparticles and nanostructures for analytical and biomedical applications" from the Russian Scientific Foundation/ 2014-2016.
3. Grant of the Government of the Russian Federation No. Discovery of fundamental sleep mechanisms for breakthrough technologies in neurorehabilitation medicine (Agreement No. 075-15-2019-1885)(2019-2021)
3. Grant of the Government of the Russian Federation No. 220 of 09 April 2010 (Agreement No. 075-15-2021-615 of 04 June 2021).(2021-2023)