Saratov Local Cluster Meeting: Clinical Studies in Biophotonics: Problems and Ethical Issues

Organized by
N.G. Chernyshevsky Saratov State University
Photonics4Life Consortium of EC FP7: Network of Excellence for Biophotonics
Institute of Precise Mechanics and Control, Russian Academy of Sciences
Research-Educational Institute of Optics and Biophotonics at Saratov State University
Saratov State Medical University
SPIE Saratov State University Student Chapter
OSA Saratov State University Student Chapter

Chairs
Valery V. Tuchin, Saratov State University
Alexey N. Bashkatov, Saratov State University

Secretary
Maxim A. Vilensky, Saratov State University
1. Clinical Studies on Biophotonics in LCS: Problems and Ethical Issues, Valery V. Tuchin, Saratov State University, Russia, Institute of Precise Mechanics and Control RAS
2. Laser Technologies in Medicine and Surgery, Sergey V. Kapralov, Saratov State Medical University, Russia
3. Laser application in otolaryngology Anatoly B. Knyazev, Saratov State Medical University, Russia
4. New technologies for diagnosis and treatment of eye diseases Tat'yana G. Kamenskikh, Saratov State Medical University, Russia
5. Approval of human clinical trials: CRDF procedure Elina A. Genina, Saratov State University, Russia
6. Phototherapy of chronic dermatoses Natal'ya A. Slesarenko, Saratov State Medical University, Russia
7. Dental activity: Photoactivated disinfection in preventive dentistry and surgical aids in orthodontics Dmitry E. Suetenkov, Saratov State Medical University, Russia
8. Experimental researches: animal models in non-clinical studies Alla B. Bucharskaya, Galina N. Maslyakova
9. Biomedical applications of gold and composite nanoparticles Nikolai G. Khlebtsov, Institute of Biochemistry and Physiology of Plants and Microorganisms RAS
10. Photodynamic action on microorganisms using nanoparticles Elena S. Tuchina, Saratov State University, Russia

POSTER SESSION:

1. Objective prediction of recurrence of bleeding from acute gastric and duodenal ulcers Ilya A. Frolov, Saratov State Medical University, Russia
2. Experimental simulation of laser fenestration of the liver Irina A. Melnikova
3. The way of optimization the laser endoscopic hemostasis Veniamin A. Grishaev
4. The experience of laser surgical treatment of snoring Ekaterina K. Evdokimova
5. The RGB color space derivatives: selection for the human skin imaging Leonid E. Dolotov, Saratov State University, Russia
6. Mathematical simulation of endothelia-dependent relaxation of smooth muscle cells Anastasia U. Neganova, Dmitry E. Postnov, Saratov State University, Russia
7. The study of the human nail bed blood flow dynamics under the action of optical clearing agents with the full - field speckle - capillaroscopy technique Polina A. Timoshina, Ekaterina A. Zubkina, Natalia V. Tsapurina, Dmitry N. Agafonov, Maxim A. Vilensky, Elina A. Genina, Valery V. Tuchin, 1, 2, 1 - Saratov State University, Russia, 2 - Institute of Precise Mechanics and Control RAS
8. Morphological changes in internal organs after prolonged administration of iron nanoparticles Nikita A. Navolokin, X.M. Kong, Galina N. Maslyakova, Alla B. Bucharskaya, Saratov State Medical University, Russia
9. Corneal graft status after penetrating keratoplasty optic Nadegda R. Lopatinskaya, Saratov State Medical University, Russia
10. Immunohistochemical and immunocytochemical studies of human eye lens in various forms of cataract Antonina S. Tishkova, Saratov State Medical University, Russia

11. Electrical stimulation with bio-feedback and magnetic sympatho-correction in the treatment of patients with primary open-angle glaucoma Ekaterina V. Veselova, Saratov State Medical University, Russia

12. Laser destruction as the optimal method of treatment of benign skin tumors Marya A. Reznikova, Natal’ya A. Slesarenko, Saratov State Medical University, Russia

13. Glucose impact on the structure of ocular tissues Anzhelika S. Orlova, Tatyana G. Kamenskikh, Ivan D. Kamenskikh, Igor O. Kolbenev, Alexey N. Bashkatov, Elina A. Genina, Valery V. Tuchin, 1 - Saratov State Medical University, Russia, 2 - Saratov State University, Russia, 3 - Institute of Precise Mechanics and Control RAS

14. OCT investigation of skin optical clearing by PEG-300 Darya K. Tuchina, Alexey N. Bashkatov, Elina A. Genina, Valery V. Tuchin, 1 - Saratov State University, Russia, 2 - Institute of Precise Mechanics and Control RAS

15. Study of photodynamic action of carbon nanoparticles on RBC using digital holographic microscopy Yana V. Tarakanchikova, Natalya V. Tkachenko, Olga A. Perepelitsina, Vladimir P. Ryabukho, 1 - Saratov State University, Russia, 2 - Institute of Precise Mechanics and Control RAS

16. Synthesis of iron oxide nanoparticles for inhibition of bacteria growth Maria V. Koulikova, Elena S. Tuchina, Vyacheslav I. Kochubey, Saratov State University

17. Absorption and scattering properties of muscle tissue Marina D. Kozintseva, Alexey N. Bashkatov, Vyacheslav I. Kochubey, Elina A. Genina, Valery V. Tuchin, Saratov State University

18. Monitoring the rat’s pancreas reperfusion changes with speckle-capillaroscopy Dmitry N. Agafonov, Polina A. Timoshina, Maxim A. Vilensky, Valery V. Tuchin, 1 - Saratov State University, 2 - Institute of Precise Mechanics and Control RAS

19. Glucose determination using chirped photonic crystal fiber Anton V. Malinin, Saratov State University

20. Chirped waveguides application for complex analysis of the blood Anastasia A. Zanishevsksaya, Anton V. Malinin, Yulia S. Skibina, Yurii. Silokhin, Valery. V. Tuchin, Valery A. Dubrovskiy, 1 - Saratov State University, Russia, 2 - Institute of Precise Mechanics and Control RAS, 3 - Saratov State Medical University, Russia