

Potential scientific supervisors: Biology & Biotechnology

№	Surname	Name	University	Scientific interests	Link to portfolio
1.	Volkova	Irina	National Research Tomsk State University	Methods for increasing the carbon sequestration potential of terrestrial and freshwater ecosystems, Dynamics of ecosystems in Western Siberia under conditions of climate and land use changes, Vulnerable ecosystems and landscapes of Siberia in a changing climate.	http://tsuod.tilda.ws/volkovaen
2.	Kurovsky	Alexander	National Research Tomsk State University	1. Study of the processes of vermicomposting and agrochemical properties of vermicompost during the processing of leaf litter in vermiculture. 2. Research of the influence of humic substances and humic preparations on the morphophysiological parameters of plants. 3. Modification of mineral nutrition of plants in order to increase the nonspecific resistance of the plant organism to a wide range of influences.	http://tsuod.tilda.ws/kurovskyen
3.	Olonova	Marina	National Research Tomsk State University	Systematics and phylogeny of grasses, plant anatomy, morphological and genetic diversity, biogeography, ecological and climatic modeling, plant conservation.	http://tsuod.tilda.ws/olonovaen
4.	Mishchenko	Tatiana	National Research Lobachevsky State University of Nizhny Novgorod	Research in the field of neuro-oncology: regulated forms of cell death, immunogenic cell death, antitumour therapy, immunotherapy, antitumour vaccination Research in the field of neurophysiology: peculiarities of functional activity of brain neuronal networks under various stress factors (including hypoxia-ischaemic conditions, tumour processes). Research of biocompatibility of nanomaterials and tissue-engineered constructs (scaffolds) with cells of the nervous system: targeted delivery systems, diagnosis and therapy of malignant brain tumours.	http://eng.unn.ru/images/Open_Doors/Profiles/mishchenko.pdf
5.	Sherstneva	Oksana	National Research Lobachevsky State	1. Development of approaches to non-invasive plant phenotyping to accelerate the breeding process.	http://eng.unn.ru/images/Open_Doors/Profiles/sherstnevaON.pdf

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			University of Nizhny Novgorod	2. Early detection of stress in plants caused by abiotic and biotic factors. 3. Remote methods of plant research. Imaging systems. Image processing.	
6.	Shilyagina	Natalia	National Research Lobachevsky State University of Nizhny Novgorod	Research in the field of radiobiology: dose-effect relationship, cell death mechanisms, witness effect. Photodynamic therapy research: antitumour activity, cellular uptake features, selectivity of accumulation in tumour models. Research on nano- and submicron particles: targeted delivery systems, diagnosis and therapy of cancer.	http://eng.unn.ru/images/Open_Doors/Profiles/shilyagina.pdf
7.	Kovaleva	Elena	Ural Federal University named after the first President of Russia B.N. Yeltsin	Development of methods for extracting biologically active substances from plant materials and food production waste, functional foods, biotransformation technologies, effective sorbents of organic and inorganic substances, catalysts, including enzymatic ones, the use of AI (neural networks) in various chemical and biotechnological processes.	https://urfu.ru/en/research/postgraduate-programs-in-english/admission-options/open-doors-olympiad/research-supervisors/elena-g-kovaleva/
8.	Sergeev	Michael	Novosibirsk State University	Species richness and assemblages of Orthoptera in a region.	https://www.nsu.ru/upload/mediabrary/425/qsmcjc5io4nxrlxhxz5b7qysmm3ujh33/sergeev-russian.pdf
9.	Minkina	Tatiana	Southern Federal University	1. Monitoring, modeling and restoration of soils contaminated with heavy metals and polycyclic aromatic compounds. 2. Nanoparticles of heavy metals in the soil-plant system: assessment and environmental risks. 3. Agro- and eco-biotechnologies to improve the quality and safety of soils and agricultural products. 4. Innovative methods for studying the stability of the soil-plant-microorganism system under various anthropogenic loads. 5. Intelligent soil diagnostic systems using machine learning methods.	https://sfedu.ru/www/stat_pages22.show?p=RR/per_eng/D&params=(per_id=%3E346)

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				<p>6. Development of a comprehensive technology for recycling crop and livestock waste in order to create a biochar with specified properties.</p> <p>7. Phytoremediation and chemoremediation of contaminated soils.</p> <p>8. Synchrotron and microfluidic technologies in the diagnosis of contaminated soils.</p> <p>9. Biochemical and physiological mechanisms for regulating plant resistance to negative influences.</p> <p>10. Metagenomic screening of the soil microbial community, nitrifying microorganisms and PAH degraders in contaminated soils.</p>	
10.	Brodskaja	Aleksandra	Peter the Great St. Petersburg Polytechnic University	Molecular biology, molecular virology, influenza virus, phylogeny of viruses, RNA interference, intracellular delivery of nucleic acids, development of recombinant immunobiological products.	https://opendoors.spbstu.ru/files/supervisors_portfolio/brodskaja.pdf
11.	Konevega	Andrey	Peter the Great St. Petersburg Polytechnic University	Nuclear medicine, molecular biophysics, structural biology, cryoelectron microscopy, cell biology, molecular biology, etc.	https://opendoors.spbstu.ru/files/supervisors_portfolio/konevega.pdf
12.	Kayumov	Airat	Kazan (Volga region) Federal University	Bacterial biofilms, antibiotic resistance, inter-bacterial interaction, Lactic acid bacteria, probiotics.	https://kpfu.ru/portal/docs/F2069813758/Kayumov.ang.docx
13.	Kratasyuk	Valentina	Siberian Federal University	Bioluminescent biosensors, Biochemistry of luminous bacteria, Bioluminescent analysis, Enzymatic bioassays for toxicity, Molecular crowding.	https://www.sfu-kras.ru/files/Kratasyuk_V.A._Struktura_nauchnogo_profilya_portfolio_PNR_2023_ENG.pdf
14.	Zyuzin	Mikhail	ITMO University	Development of nanomaterials for biomedical applications, drug delivery, light-sensitive nanomaterials, microfluidics.	https://aspirantura.itmo.ru/?main=43
15.	Zun	Pavel	ITMO University	Applying computer models, both imitation-based and ML-based, to improve understanding of tissue function and properties, to find ways to design better	https://aspirantura.itmo.ru/?main=43

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				<p>medical devices and to grow tissues in vitro for transplantology; validation and verification of these models. Main application area is cardiology and the circulatory system.</p>	
16.	Bychkova	Elena	ITMO University	<ol style="list-style-type: none"> 1. Development and assessment of the quality of food products of functional, specialized, and therapeutic and prophylactic directions. 2. Development of biologically active additives from plant raw materials with high antioxidant activity. 3. Study of the process of hydrolysis of high-protein plant materials. 4. Research into the microencapsulation process for preserving biologically active substances of plant materials. 	https://aspirantura.itmo.ru/?main=43