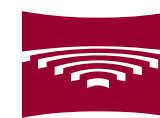


Most important publications

- Tretjakovs P., et al. Neopterin, cellular adhesion molecules and myeloperoxidase in metabolic syndrome patients with coronary artery disease. *Journal of Diabetes*, 2011, 3 (Suppl): 78–79.
- Rumaka M., et al. Body mass and body composition in students. *RSU Collection of scientific papers*, 2010: 83–88.
- Tretjakovs P., et al. Relation of inflammatory chemokines to insulin resistance and hypoadiponectinemia in coronary artery disease patients. *European Journal of Internal Medicine*, 2009, 20: 712–717.
- Krasilnikova J., et al. Effect of the plant originated compound containing diarylheptanoids on some antioxidants and lipid peroxidation blood markers. *Bull. of Mosbach Colloquium*, 2007, 4: 21–22.
- Tretjakovs P., et al. Interleukin-6 gene promoter-174G/C polymorphism and insulin resistance: a pilot study. *Clinical Chemistry and Laboratory Medicine*, 2007, 45(9):1145–1148.
- Tretjakovs P., et al. The effect of serotonin 5-HT₂ receptor inhibitor on vasomotor responses. *Vascular Disease Prevention*, 2006, 3(4): 397–404.
- Krasilnikova J., et al. Antioxidant acting of natural adaptogen *Panax ginseng* on total antioxidant status and lipid peroxidation in sportsmen. *Intern. Journal of Immunorehabilitation*, 2006, 6(2): 68–69.

Patents

- LV- Nr. 14193B; 19/02/2009: Compound inhibiting pancreatic lipase in the blood. G.Teliševa, J. Krasīņņikova, O. Bikovens, T. Dižbite, M. Girgensone.
- LV- Nr. 14222B; 12/07/2010: Method proved for the treatment efficiency of chronic bronchitis. E. Bagirovs, J. Krasīņņikova, V. Baidak, I. Sergelis, M. Girgensone.
- LV- Nr. 14065B; 09/09/2009: Method proved for the treatment of chronic gastritis and reflux-oesophagitis. E. Bagirovs, J. Krasīņņikova, V. Baidak, I. Sergelis, M. Girgensone.
- LV- Nr.14030B; 04/06/2009: Substance reducing the concentration of triacylglycerols in the blood. G. Teliševa, J. Krasīņņikova, O. Bikovens, T. Dižbite, M. Girgensone.
- LV- Nr. 14172B; 11/12/2008: Substance increasing the level of glutathione in the blood. G. Teliševa, J. Krasīņņikova, O. Bikovens, T. Dižbite, M. Girgensone.
- LV- Nr. 14044B; 01/09/2009: Method proved for the treatment efficiency of the oral cavity mucosa and periodontal tissue diseases. E. Bagirovs, J. Krasīņņikova, V. Baidak, I. Sergelis, M. Girgensone.
- LV- Nr. 14012B; 20/04/2009: Compound increasing the level of hemoglobin in the erythrocytes. G. Teliševa, J. Krasīņņikova, O. Bikovens, T. Dižbite, M. Girgensone.
- LV- Nr. 13854B; 27/08/2008: Method of prognosticating the development of diabetes mellitus 2 in the patients with metabolic syndrome. J. Krasīņņikova, I. Fizdel, M. Girgensone, I. Kreile.



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Research groups (group leader)

- Development of new biomarker (cytokine, growth factors, etc.) panels for practical application in health care as a diagnostic tool for evaluating the risk of type 2 diabetes and the efficacy of drug therapies with respect to drug target protein genes and pharmacogenetic assessment of medications used for the treatment of diabetes and vascular diseases (Assoc. Prof. P. Tretjakovs).

- Effect of the type of physical activity, body composition and metabolic peculiarities on myokine and muscle metaboreceptor afferentation effects (Prof. L. Aberberga-Augškalne).

- Daytime sleepiness in drivers as a road traffic safety problem (Assist. Prof. L. Blumfelds).

- Functional activity of *Alnus incana* hydrophilic extracts with different diarylheptanoid concentrations in patients with dysmetabolical disorders (Assist. Prof. J. Krasīņņikova).

- Natural products as drugs and leads for drugs: Lignin - able and effective anti-aging compounds (Assist. Prof. J. Krasīņņikova).



Evaluation of daytime sleepiness in drivers as a road traffic safety problem



Body composition evaluation using the bioimpedance method



Perimeter Oculus Twinfield



Evaluation of cardiorespiratory parameters with the PowerLab system



Detection of anti-aging compounds

Projects (including collaboration with other departments and research institutes)

- The grant No. 2010. 10-4/VPP-4_8.1 and _8.2 of the framework of the National Program „Clinical, molecular biological, and morphofunctional study of the prognosis, diagnostics and treatment of inherited and acquired childhood diseases” (head: Prof. A. Pētersons and Prof. D. Gardovska; researcher: Assoc. Prof. P. Tretjakovs).

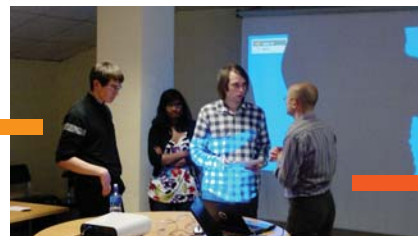
- The grant No. 2010. 10-4/VPP-4_3.4 of the framework of the National Program „Study of the diabetic complications and biological activity of cardiovascular medications” (head: Assist. Prof. I. Konrāde; researcher: Assoc. Prof. P. Tretjakovs).

- European program: 0804 CB COST: „Chemical biology with natural products” and 0602 BM COST: „Adipose tissue: a key target for the prevention of metabolic syndrome” (representative member of Latvia: Assist. Prof. J. Krasīņņikova).

- Collaboration with the Latvian State Wood Chemistry Institute for medical aspects in preclinical trials, in the framework of „Latvian State Research Program NR 2010, 10-4/VPP” (head: Prof. G. Telysheva; researcher: Assist. Prof. J. Krasīņņikova).

- LZP grant No. 09.1373 „Effect of the type of physical activity, body composition and metabolic peculiarities on myokine and muscle metaboreceptor afferentation effects” (head: Prof. L. Aberberga-Augškalne).

Guest lecturer
Prof. P.Trouillas
(Université de Limoges)
and students



Teaching activity (courses in English)

- Physiology
- Adaptation of vital functions
- Medical chemistry
- Biochemistry
- Cell metabolism
- Preclinical dysmetabolism
- Biochemistry of different pathologies

EXPERIENCE OF SUPERVISING PhD RESEARCH

- Astra Zviedre „Relationship of acute abdominal cavity inflammation processes to alterations in blood cytokine concentrations in children” (PhD supervisors: Assoc. Prof. A. Eņģelis, Assoc. Prof. P. Tretjakovs).

- Ilze Meldere „Clinical and molecular biological examinations in newborns with ulcerative necrotizing enterocolitis” (PhD supervisors: Prof. A. Pētersons, Assoc. Prof. P. Tretjakovs).

- Edgars Zarembo „Aspects of clinical and molecular biological examinations of post-traumatic pancreatitis in children” (PhD supervisors: Prof. A. Pētersons, Assoc. Prof. P. Tretjakovs).

- Daila Pugačevska „Obstruction of the pyeloureteral segment (inherited hydronephrosis)” (PhD supervisors: Prof. A. Pētersons, Assoc. Prof. P. Tretjakovs).

- Karlina Elksne „Novel prognostic biomarkers for gestational diabetes” (PhD supervisors: Assoc. Prof. D. Rezevska, Assoc. Prof. P. Tretjakovs).