Curriculum vitae
Lucia Krajčík Lauková, MSc. PhD

Personal Data

Date of birth 31-03-1990

Contact University for Continuing Education Krems
Dr. Karl-Dorrek-Strasse 30
3500 Krems
Phone: +43 (0)2732 893-2688
E-Mail: lucia.krajcik-laukova@donau-uni.ac.at

Current Positions, Employment, and Faculty Appointments

since October 2018 **Postdoc**
Center for Biomedical Technology
Department for Biomedical Research
University for Continuing Education Krems, Krems, Austria

Education

2009 - 2012 **Bc. in Biology**
Department of Genetics, Faculty of Natural Sciences, Comenius University in Bratislava, Slovakia

2012 - 2014 **MSc. in Genetics**
Department of Genetics, Faculty of Natural Sciences, Comenius University in Bratislava, Slovakia

2014 - 2018 **PhD in Normal and Pathological Physiology**
Institute of Molecular Biomedicine, Faculty of Medicine, Comenius University in Bratislava, Slovakia

Academic and Professional Career

2014 - 2018 **Researcher**
Institute of Molecular Biomedicine, Faculty of Medicine, Comenius University in Bratislava, Slovakia

since October 2018 **Postdoc**
Center for Biomedical Technology, Department for Biomedical Research, University for Continuing Education Krems, Krems, Austria

Research Interests

- Extracellular DNA
- NETosis as a way of releasing of extracellular DNA

- Extracellular vesicles (characterization and functional studies in inflammation and coagulation)
- Pathophysiology of sepsis
- Changes of glycosylation pattern in infection

Funding and Academic Awards

- ESAO-SAGE Award 2021
- 1st place in the Falling Walls Lab Slovakia (2018)
- 1st place in the Biomolecular section of the XIII. scientific PhD conference of the Medical faculty of Comenius University in Bratislava (2018)
- National Scholarship Programme of Slovak Republic (2017)
- Ernst Mach Grant (2016)
- Tatra Bank Foundation Grant (2016)
- 3x Grant of Comenius University (2015/2016, 2016/2017 and 2017/2018)

Peer-Reviewed Articles

Ebeyer-Masotta, M., Eichhorn, T., Weiss, R., Semak, V., **Lauková, L.**, Fischer, M. B., Weber, V. Heparin-Functionalized Adsorbents Eliminate Central Effectors of Immunothrombosis, Including Platelet Factor 4, High Mobility Group Box 1 Protein, and Histones. Int J Mol Sci. 2022, accepted.

Steinberger, S., Karuthedom George, S., **Lauková, L.**, Weiss, R., Tripisciano, C., Birner-Gruenberger, R., Weber, V., Allmaier, G., Weiss, V.U. A possible role of gas-phase electrophoretic mobility molecular analysis (nES GEMMA) in extracellular vesicle research. Anal Bioanal Chem. 2021, 413(30):7341-7352. doi: 10.1007/s00216-021-03692-y.

Štenová, E.; Bakošová, M.; Lauková, L.; Celec, P.; Vlková, B. Biological Anti-TNF-a Therapy and Markers of Oxidative and Carbonyl Stress in Patients with Rheumatoid Arthritis. Oxid Med Cell Longev, 2021, 2021: 5575479.

George, S.K., **Lauková, L.**, Weiss, R., Semak., V, Fendl, B., Weiss, V.U., et al. Comparative analysis of platelet-derived extracellular vesicles using flow cytometry and nanoparticle tracking analysis. Int. J. Mol. Sci. 2021, 22(8):3839. doi: 10.3390/ijms22083839.

Eichhorn, T., Linsberger, I., **Lauková, L.**, Tripisciano, C., Fendl, B., Weiss, R., König, F., et al. Analysis of inflammatory mediator profiles in sepsis patients reveals that extracellular histones are strongly elevated in nonsurvivors. Mediators Inflamm. 2021, 2021: 8395048. doi: 10.1155/2021/8395048.

Lauková, L., Weiss, R., Semak, V., Weber, V. Desialylation of platelet surface glycans enhances platelet adhesion to adsorbent polymers for lipoprotein apheresis. Int. J. Artif. Organs 2020, 44(6): 378–384. doi: 10.1177/0391398820968849.

Lauková, L., Konečná, B., Janovičová, Ľ., Vlková, B., Celec, P. Deoxyribonucleases and Their Applications in Biomedicine. Biomolecules. 2020, 10(7):1036. doi: 10.3390/biom10071036.

Janovičová, Ľ., Konečná, B., Vokálová, L., **Lauková, L.**, Vlková, B., Celec, P. Sex, age, and bodyweight as determinants of extracellular DNA in the plasma of mice: A cross-sectional study. Int. J. Mol. Sci. 2019, 20(17) pii: E4163. doi: 10.3390/ijms20174163.

Lauková L., Bertolo E.M.J., Zelinková M., Borbélyová V., Čonka J., Kovalčíková A.G., Domonkos E., Vlková B., Celec P. Early dynamics of plasma DNA in a mouse model of sepsis. Shock 2019, 52(2):257-263.. doi: 10.1097/SHK.0000000000001215.

Lauková L., Konečná B., Vlková B., Mlynáriková V., Celec P., Šteňová E. Anti-cytokine therapy and plasma DNA in patients with rheumatoid arthritis. Rheumatology International 2018, 38:1449-1454. doi: 10.1007/s00296-018-4055-8.

Lauková L., Konečná B. NETosis − Dr. Jekyll and Mr. Hyde in inflammation. J. Appl. Biomed. 2018, 16:1–9. doi:10.1016/j.jab.2017.10.002.

Celec P., Vlková B., **Lauková L.**, Bábíčková J., Boor P. Cell-free DNA: the role in pathophysiology and as a biomarker in kidney diseases. Expert Rev. Mol. Med. 2018, 20: e1. doi:10.1017/erm.2017.12.

Konečná B., **Lauková L.**, Vlková B. Immune activation by nucleic acids: A role in pregnancy complications. Scand. J. Immunol. 2018, 87:e12651. doi:10.1111/sji.12651.

Lauková L., Konečná B., Bábíčková J., Wagnerová A., Melišková V., Vlková B., Celec P. Exogenous deoxyribonuclease has a protective effect in a mouse model of sepsis. Biomed. Pharmacother. 2017, 93:8–16. doi:10.1016/j.biopha.2017.06.009.

Čonka J., Konečná B., **Lauková L.**, Vlková B., Celec P. Fetal DNA does not induce preeclampsia-like symptoms when delivered in late pregnancy in the mouse. Placenta 2017, 52:100–105. doi:10.1016/j.placenta.2017.02.008.

Vokálová L., **Lauková L.**, Čonka J., Melišková V., Borbélyová V., Bábíčková J., Tóthová L., Hodosy J., Vlková B., Celec P. Deoxyribonuclease partially ameliorates thioacetamide-induced hepatorenal injury. Am. J. Physiol. Gastrointest. Liver Physiol. 2017, 312:G457–G463. doi:10.1152/ajpgi.00446.2016.