Extracellular vesicles – a novel source of disease biomarkers

Date: Thursday, 7th of December 2017 (8.30-15h)
Location: University of Ljubljana, Faculty of Medicine, Institute of Biochemistry, Vrazov trg 2, Ljubljana

Workshop programme:

8.30 – 8.50 Coffee break

8.50 – 9.00 Opening address:
Prof. Dr. Ksenija Geršak, Vice Dean of Science and Research (UL, MF)
Prof. Dr. Ana Plemenitaš, Head of the Institute of Biochemistry (UL, MF, IBK)

Session 1 Extracellular vesicles as novel intercellular communicators in health and disease
9.00 – 9.40 The role of extracellular vesicles in spreading an intercellular stress response (Dave Carter, Oxford Brookes University, UK)
9.40 – 10.00 Intracellular localization and release of Nef.GFP from human microglia in culture (Matjaž Stenovec, UL, MF, PAFI)
10.00 – 10.20 Mechanism of activation and role of partially oxidized extracellular vesicles in chronic inflammatory diseases (Mateja Manček Keber, KI)
10.20 – 10.30 Isolation of fungal extracellular vesicles, the potential host-pathogen messengers (Tilen Konte, UL, MF, IBK)
10.30 – 11.10 Coffee break

Session 2 Extracellular vesicle concentration and size profile as potential biomarkers of disease
11.10 – 11.30 Characterization of extracellular vesicles by Nanoparticle Tracking Analysis and Dynamic Light Scattering (Tom Dennison, LKB, Malvern)
11.30 – 11.50 Characterisation of particles in the exosome sample stained with fluorescence dye PKH26 (Pia Pužar Dominkuš, IBK)
11.50 – 12.20 Concentration of extracellular vesicles by flow cytometry in patients with Charcot neuroarthropathy and mastocytoma (Veronika Kralj Iglič, UL, ZF)
12.40 – 13.40 Buffet lunch sponsored by LKB and Malvern

Session 3 Extracellular vesicle microRNAs as potential biomarkers of disease
13.40 – 14.00 Comparison of approaches for isolating extracellular vesicles from plasma (Metka Lenassi, UL, MF, IBK)
14.00 – 14.20 Circulating cell-free and exosomal miRNAs as potential biomarkers for leaky HIV reservoirs (Jana Ferdin, UL, MF, IBK)
14.20 – 14.40 Next-generation sequencing of extracellular vesicle small RNA in type 1 diabetes (Tine Tesovnik, UL, MF, UMC)
14.40 – 15.00 CRISPR/Cas9 delivery by extracellular vesicles for genome editing and therapeutic transcriptional regulation (Duško Lainšček, KI)