



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)

12.20 – 12.40

Atomic Force Microscopy analysis of extracellular vesicles

(Pietro Parisse, Elettra -Sincrotrone Trieste S.C.p.A., Italy)

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)