

Welcome to the International Association of Gerontology and Geriatrics European Region Congress 2019

23rd – 25th May 2019 in Gothenburg, Sweden



On behalf of the **International Association of Gerontology and Geriatrics – European Region** we welcome you to Gothenburg and the 9th IAGG-ER congress to present and share findings, ideas and innovations on multidisciplinary perspectives of ageing and the life-course.

The congress theme is **‘Towards Capability in Ageing – from cell to society’**. The theme emphasizes our ability to perform actions in order to reach valued goals within the macro, meso, and micro contexts.

The congress is the natural meeting place for researchers and professionals engaged in various scientific enquires and aging matters; whether in biological science, medical and health sciences, social sciences, in humanities or aging services. The main track of the congress includes sessions on multidisciplinary aspects of



The congress is arranged in collaboration with the local Centre for Ageing and Health (AgeCap) at the University of Gothenburg, the two Swedish national associations; Swedish Gerontological Society (SGS), Geriatric Medicine in Sweden (SGF), both also members of the Nordic Gerontological Federation (NGF).

We look forward to meeting you in **Gothenburg May 23-25, 2019**

On behalf of the local Organizing Committee and IAGG-ER

*Boo Johansson Congress president, Ingmar Skoog Secretary General
Marie Kivi Deputy Secretary General and Clemens Tesch-Römer IAGG-ER
president*



**OFFICIAL IAGG-ER 2019
CONFERENCE WEBSITE**

[PO.T:25] Peptides Regulate Signal Molecules Expression in Renal Senescence Cells

Tatiana Nichik [Russia]¹, Ekaterina Mironova [Russia]¹, Anastasia Ilyna [Russia]¹, Xsenia Ivko [Cyprus]², Andrey Bogatyrev [Russia]¹, Vladimir Khavinson [Russia]¹

Saint Petersburg Institute of Bioregulation and Gerontology¹, Predictive Medicine Institute²

Searching for medications for correction of the kidney pathology is a topical issue. The research objective is a comparative study of the influence of the kidney polypeptide complex (KPC) and AED and EDL peptides on the expression of renal pathology markers during the aging of renal cell cultures. Primary cultures of rat kidney cells were divided into 4 groups: 1 (control) – physiological solution, 2 - AED peptide (20 ng/ml), 3 - EDL peptide (20 ng/ml), 4 - KPC (100 ng/ml). An immunocytochemical study of “old” cultures (14th passage) was carried out using antibodies to Ki67 (1:50, Novocastra), p53 (1:50, Novocastra), MMP14 (1:75, Novocastra). Morphometry was performed using the “Videotest Morphology 5.2” for the expression area. Statistical data processing was performed in the “Statistica 7.0” using the Shapiro-Wilk and Kruskal-Wallis criteria. KPC in the “old” cultures of kidney cells increased Ki67 expression 2-fold. AED and KPC peptides reduced p53 expression in “old” cell cultures 1.33-fold and 1.42-fold, respectively. EDL peptide increased MMP14 expression 1.52-fold in “old” cell cultures. AED and KPC peptides promote activation of proliferation and reduction of apoptosis in senesce kidney cells, i.e. possess nephro- and geroprotective properties. EDL peptide, regulating the extracellular matrix remodeling in the kidney tissue, can be recommended for research in renal failure models.

Objectives: nephroprotective peptides; regulation of cell senescence; regulation of Ki67, p53, MMP14 expression.
