

EWA ŁUCJA STĘPIEŃ Ph.D. Associate Professor in Faculty of Physics, Astronomy and Applied Informatics at Jagiellonian University, clinical consultant in laboratory genetics in the Holycross Cancer Center in Kielce (H-index: 13, summary IF: 200, citations: 524) for 10 years a manager of the Laboratory for Molecular Biology and Research in John Paul II Hospital (Krakow). **Field of interest**

- Endothelial dysfunction caused by stress factors such as hypoxia, infections or hyperglycemia;
- New biomarkers of vascular diseases, mostly atherosclerosis, with the focus on intercellular communication (microparticles) and proinflammatory mediators or endothelium protective proteins, including osteopontin (OPN) and osteoprotegerin (OPG)

§ scientific achievements 1) Czyżewska-Buczyńska A, Zuk N, Karczewski M, Bałasz S, Grendziak R, Zapotoczny N, Stępień E, et al. Plasma osteoprotegerin levels are determined by primary cardiovascular events in late middle-aged but not in young elderly male subjects. Int J Cardiol. 2014;173(3):507-9. IF: 6.18, citations: 0; 2) Paszek E, Czyż J, Woźnicka O, Jakubiak D, Wojnarowicz J, Łojkowski W, Stępień E. Zinc oxide nanoparticles impair the integrity of human umbilical vein endothelial cell monolayer in vitro. J Biomed Nanotechnol. 2012;8(6):957-67. IF: 7.58, citations: 14; 3) Stepień E et al. Microparticles, not only markers but also a therapeutic target in the early stage of diabetic retinopathy and vascular aging. Expert Opin Ther Targets. 2012;16(7):677-88. IF: 3.72, citations: 5; § experience in research projects and R&D projects Principal Investigator/Project Manager: The role of microparticles in pathomechanisms of diabetic retinopathy - analysis of intercellular communication mechanisms in endothelial aging; Project ID: 2012/07/B/NZ5/02510; coauthor of project: Interdisciplinary center for the new technics and biomedical imaging (IOITOB) as a proposal 2.2 Support for developing common research infrastructure to scientific institutions, Operating Program for John Paul II Hospital in Krakow, Innovative Economy 2007-2013. § other achievements - including prestigious prizes 1) Individual Jagiellonian University Rector's award (2009); 2) 2nd Award by Polish Ministry of Health and Social Security "Evidence Based Medicine in practice" (2007).