

Izabela Papiewska-Pająk

ASSISTANT PROFESSOR - INSTITUTE OF MEDICAL BIOLOGY

* ibmpan.pl/pl/struktura/pracownie-i-laboratoria/pracownia-sygnalizacji-komorkowej/zespol/

Scopus bibliometric data: citations 462 · documents 23 · h-index 14

Currently held positions _____

Institute of Medical Biology of the Polish Academy of Sciences

ASSISTANT PROFESSOR

Lodz

Scientific profile and collaborations

My scientific research focuses on molecular biology, especially on mechanisms of **cancer progression**. For many years I studied endothelial cell activation mechanisms under pathological conditions, particularly, the influence of selected **growth factors** on proteomic and functional changes of vascular endothelial cells in the process of pathological angiogenesis. I also investigated the **role of serpins** in endothelial cell activity and proteasome activity. Moreover, I demonstrated the effectiveness of active **molecular tools** (**ribozyme, DNAzyme**) in the **regulation of integrin receptor expression** in pathological angiogenesis and cancer metastasis. Currently my main research interest focuses on the aspect of the **role of microenvironment in cancer progression**. In recent years, I conduct the research on colorectal cancer, I investigate **cancer cell-derived extracellular vesicles and platelet microvesicles** as modulators of tumor microenvironment and pre-metastatic niche in vitro and in vivo. I have extensive experience in extracellular vesicle characteristic in the area of basic research and of searching for diagnostic and prognostic factors in cancer.

Collaboration:

University of Lodz, Poland Medical University of Lodz, Poland Centre of Molecular and Macromolecular Studies, Polish Academy of Sciences, Lodz, Poland Université de Reims, Champagne Ardenne, France

Selected publications

Snail Overexpression Alters the microRNA Content of Extracellular Vesicles Released from HT29 Colorectal Cancer Cells and Activates Pro-Inflammatory State In Vivo [link]

Platelet-derived microparticles stimulate the invasiveness of colorectal cancer cells via the p38MAPK-MMP-2/MMP-9 axis [link]

Acute phase protein alpha 1-acid glycoprotein interacts with plasminogen activator inhibitor type 1 and stabilizes its inhibitory activity [link]

Research grants _____

Principal Investigator: 1 grant: French Government

Co-Investigator: 20 grants: KBN, NCN, MNiSW, NCBiR, FNP, POIG, Multilateral Polish-CNRS-INCA, The European 5th

Framework Programme

International research stays _____

France, Lille, INSERM U524, Genetique Molecularie et Approches Therapeutiques des Hemopaties Malignes **France,** Reims, CNRS UMR 7369, MEDyC, Université de Reims