



# Joanna Boncela

FULL PROFESSOR – IMB PAS · HEAD OF LABORATORY OF CELLULAR SIGNALING – IMB PAS

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ORCID 0000-0001-8419-7012 | Scopus bibliometric data: citations 772 · documents 45 · h-index 18 | Joanna-Boncela

## Currently held positions

**Institute of Medical Biology of the Polish Academy of Sciences**

FULL PROFESSOR POSITION

Łódź

**Institute of Medical Biology of the Polish Academy of Sciences**

HEAD OF LABORATORY OF CELLULAR SIGNALLING

Łódź

## Scientific profile and collaborations

The main goal of my research is the understanding of the mechanisms of **cancer development** and the elucidation of **the relationship between cancer and its microenvironment**. My research, which may ultimately lead to **the identification of potential diagnostic markers or therapeutic targets**, focuses on investigating the mechanisms responsible for the acquisition of invasive properties by tumour cells. We are currently exploring how **microvesicles** secreted by colorectal cancer (CRC) and platelets modify the CRC microenvironment. Research in my laboratory is carried out in vitro (cell lines) and in vivo (mouse models).

### Collaboration:

Poland, Medical University of Lodz, Medical University of Gdansk,

Norway, University of Bergen, France, Université de Reims Champagne Ardenne

## Selected publications

- 2021 *Neuromedin U induces an invasive phenotype in CRC cells expressing the NMUR2 receptor* [\[link\]](#)
- 2022 *Neuromedin U secreted by colorectal cancer cells promotes a tumour-supporting microenvironment* [\[link\]](#)
- 2023 *Platelet-derived microparticles stimulate the invasiveness of colorectal cancer cells via the p38MAPK-MMP-2/MMP-9 axis* [\[link\]](#)

## Research grants

**Principal Investigator:** 3 grants: Polish Ministry of Science, NCN, Polish-Norwegian Research under The Norwegian Financial Mechanism 2009-2014

**Investigator:** 13 grants: KBN, Polish Ministry of Science, NCN, POIG.01.01.02-10-107/09, HARC – Healthy Ageing Research Centre (FP7-REGPOT-2012-2013-1), MolMed – Centre of Excellence in Molecular Medicine (FP5)

## Obtained patents

1 patent given by Polish Patent Office

## International research stays

**K U Leuven, Belgium** Laboratory for Pharmaceutical Biology and Phytopharmacology, Faculty of Pharmaceutical Sciences

**Umea University, Sweden** Department of Medical Biochemistry and Biophysics