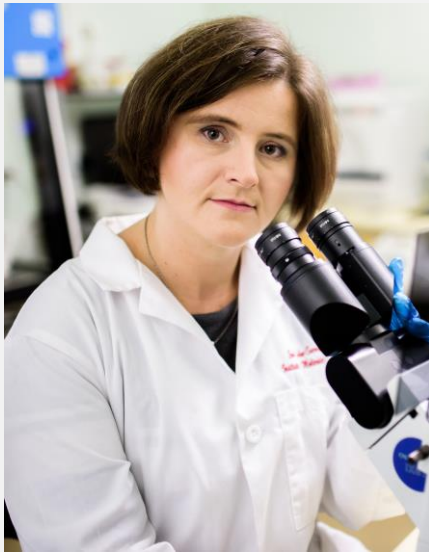


# Pęcherzyki zewnątrzkomórkowe - nowe narzędzia w diagnostyce i terapii



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## **Abstract**

Pęcherzyki zewnątrzkomórkowe (ang. *extracellular vesicles*, EVs) stanowią populację małych obłonionych nanocząstek biologicznych wydzielanych przez większość komórek, w tym komórki dojrzałe oraz komórki macierzyste (KM).

Rozwijające się obecnie dynamicznie badania w tym obszarze wykazują, że EVs ogrywają kluczową rolę w komunikacji międzykomórkowej zarówno w stanach fizjologicznych jak i patologicznych. Mogą one przenosić bioaktywne cząsteczki, w tym m.in. białka, mRNA oraz miRNA modulujące funkcje komórek docelowych, co wykorzystuje się obecnie m.in. w celu opracowania nowych podejść w regeneracji tkanek z wykorzystaniem bezkomórkowych preparatów/ pochodnych z KM. EVs krążące w płynach ustrojowych mogą natomiast pełnić również istotne narzędzia w diagnostyce, świadczące o toczącym się procesie chorobowym.

Rosnące zainteresowanie pęcherzykami zewnątrzkomórkowymi w tych dwóch aspektach, czyni je dziś potencjalnymi nowymi i interesującymi narzędziami kolejnej generacji w diagnostyce oraz terapiach regeneracyjnych.

## Biografia

**Prof. Ewa K. Zuba-Surma, Ph.D., D.Sc.**

Group Leader at the Department of Cell Biology, Faculty of Biochemistry, Biophysics and Biotechnology JU

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Measurable effects

**Parametric achievements:**

✓47 original publications (IF journals only)

✓36 review articles (IF journals only)

✓4editorial letters and other publications with IF (with total IF=21,995)

✓11book chapters

✓75meeting abstracts (listed in Web of Science)

✓1patent and 9 patent applications

**Parametric indicators based on total scientific achievements:**

✓Total Impact Factor (IF) = 372,989

✓Total no. of citations = 4816(including 4397 without auto-citations)

✓Hirsch factor (H): 35

### Education

**Master of Science (MS)**-June 1999; Jagiellonian University, Department of Immunology; Krakow, Poland; Specialty: immunology;

**Doctor of Philosophy (PhD)**-June 2004;Jagiellonian University, Department of Immunology; Krakow, Poland; Specialty: immunology;

**Doctor of Science (DSc)**-November 2009; Pomeranian Medical University; Department of Physiology; Szczecin, Poland, Specialty: Medicine -medical biology;

**Full Professorship**-February2020; Jagiellonian University Medical College, Krakow, Poland; Specialty: Medicine -medical biology.

### Professional Positions

2003-2005 **Research Assistant**, Department of Transplantation Polish-American Institute of Pediatrics University's Children Hospital Jagiellonian University, Krakow, Poland;

2005-2009 **Postdoctoral Fellow** Institute of Molecular Cardiology Division of Cardiology University of Louisville, Louisville, Kentucky, USA Dr Roberto Bolli/ Dr Buddhadeb Dawn's group;

2006 -2009 **Postdoctoral Fellow** Stem Cell Biology Institute Brown Cancer Center University of Louisville, Louisville, Kentucky, USA Dr Mariusz Z. Ratajczak's group;

2009 -2015 **Assistant Professor (Adjunct)** Faculty of Biochemistry, Biophysics and Biotechnology Jagiellonian University, Krakow, Poland;

2011 -2018 **Visiting Professor** Cardiovascular Research Institute Kansas University Medical Center Kansas City, KS, USA;

2011-Present, **Group Leader** Department of Cell Biology Faculty of Biochemistry, Biophysics and Biotechnology Jagiellonian University, Krakow, Poland;

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Selected publications:

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