

Biographical sketch

Joanna Zawacka-Pankau, PhD in Biochemistry

Dr Joanna Zawacka-Pankau has defended her PhD thesis from the Intercollegiate Faculty of Biotechnology at the University of Gdansk, Poland in 2005.

Since 2012, Joanna runs her research projects in Sweden, at Karolinska Institutet and Karolinska University Hospital. She has been a Principal Investigator on several research grants on pharmacological activation p53 family members for improved cancer therapy, both in Poland and in Sweden.

While pursuing her PhD, she worked under supervision of Prof. Anna J. Podhajska.

This is when she became interested in drug repurposing for improved cancer therapy and pharmacological targeting of p53 tumor suppressor. After defending her thesis, she has done a two-year-long postdoctoral training at Karolinska Institutet at Prof. Galina Selivanova Lab where she studied the outcome of wild-type p53 activation in cancer cells.

In 2012 she was awarded an Assistant Professor position at Karolinska Institutet to further investigate the pharmacological targeting of p53 pathway for improved cancer therapy. Her team has shown that repurposed protoporphyrin IX stabilizes and activates p53 protein family which induces cancer cells death while sparing normal cells. At the same time, in collaboration with Professor Klas Wiman from Karolinska Institutet, Joanna and colleagues have contributed to understanding the mechanism by which APR-246/MQ, a molecule in Phase III clinical trial in TP53 mutated Myelodysplastic Syndrome in combination with Azacitidine, stabilizes and reactivates mutant p53 *in vitro* and in cancer cells.

Joanna served as a co-supervisor of two PhD theses defended at Karolinska Institutet and is currently focusing on translating her findings on drug repurposing into clinical application.