Urszula **McClurg**

Group Leader – Institute of Medical Biology

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Scopus bibliometric data: citations **1037** · documents **24** · h-index **19**

Currently held positions

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

Group Leader

Scientific profile and collaborations

Cancer remains one of the main focus areas of translational research as it is predicted that 50% of the population will experience this disease at some point in their lifetime. Even though major progress has been made in cancer diagnosis and treatment it still remains the second leading cause of death with 8.4 million deaths recorded worldwide in 2012. Consequently, understanding the molecular mechanisms behind cancer development and progression is crucial for developing effective treatments and discovering valuable biomarkers.

Meiosis-associated proteins have never been explored in the context of cancer research as their expression is thought to be tightly controlled and restricted to meiotic cells. We have recently discovered that, contrary to accepted knowledge, a group of meiotic proteins is expressed in a variety of human cancer models. More importantly, our analysis of multiple large datasets of patient cancer samples reveals that these proteins are expressed in the majority of cancer patients and that their levels are predictive of cancer outcome and disease progression. Our work focuses on validating these meiosis-associated proteins as **biomarkers in cancer stratification** and determining their role in cancer progression. Identifying new oncogenes and pathways of carcinogenesis could provide **novel therapeutic strategies**.

Our laboratory is funded through international funding agencies such as EMBO and consequently we work within a network of international collaborators including UK, Spain, Singapore, Germany and Italy. All members of our group frequently present their data at conferences all over the world. Furthermore, every member of our group is encouraged to spend 6-12 months of their research time in another laboratory, this is funded generously via our EU grants.

Selected publications

2023 ***Cancer and meiotic gene expression – two sides of the same coin?*** **[link]**

2021 ***Centrosome dysfunction associated with somatic expression of the synaptonemal complex protein TEX12*** **[link]**

2018 ***Molecular mechanism of the TP53-MDM2-AR-AKT signalling network regulation by USP12*** **[link]**

Research grants

Principal Investigator: >20 grants: EMBO, MRC, Royal Society, NCN, others

Co-Investigator: >30 grants (EU HORIZON 2020, Wellcome Trust, others

International experience

UK MSc, University of Bradford

UK PhD, University of Leeds

Sweden EU funded placement at Karolinka Institute during PhD

UK Post-Doc, Northern Institute for Cancer Research

UK Group Leader, Newcastle University

UK Group Leader, Liverpool University