



Jakub Rohlena graduated from Charles University in Prague, and obtained his Ph.D. from the University of Utrecht. At present he works at the Institute of Biotechnology of the Czech Academy of Sciences in the BIOCEV research centre in Vestec.

Our laboratory focuses on the role of mitochondria in cancer. Recently we showed that cancer cells lacking mitochondrial (mt-)DNA produce tumors in mice only after they have acquired mtDNA from the stroma of the host animal. This occurs by a transfer whole mitochondria with their mt-DNA payload, and leads to the full recovery of mitochondrial respiration before tumors appear. At present we are investigating why respiration is required for these tumors to grow. At the same time we are devising effective and selective approaches to target mitochondrial respiration for cancer therapy.