

**Professor Maciej Żylicz** was born in 1953 in Gdansk. Studied experimental physics and biology at the University of Gdansk. In 1980 he completed his doctorate in biochemistry, in 1986 he was awarded his habilitation degree in molecular biology, and in 1992 he received the title of Professor. In 1980-1999 he worked at the University of Gdansk, where he was the head of the Department of Molecular Biology (1991-1999) and vice-rector for science (1990-1993). In 1982-1984 he was postdoctoral fellow at University of Utah and Stanford University. In 1993-1994 he was a visiting professor at the Institute of Oncology of the University of Utah Medical Center. In 1999-2018 he worked at the International Institute of Molecular and Cell Biology in Warsaw (1999-2016, head of the Molecular Biology Department). In 2005 he was elected President (Executive Director) of the Foundation for Polish Science (2005-present).

Professor Żylicz is distinguished in the field, due to an extensive contribution to the molecular biology of heat shock proteins. He isolated the first heat shock proteins and described their biochemical and biophysical properties. He elucidated the molecular mechanism of action of heat shock proteins in DNA replication initiation, transcription and proteolysis. He has also presented first evidence that heat shock proteins work as molecular chaperones by protecting other proteins from aggregation and dissociating already existing protein aggregates. Moreover, he has shown that elements of the proteolytic machinery possesses the chaperone activity. Recently, he has discovered that molecular chaperones are required for the transcriptional activity of wild-type p53 tumour suppressor protein and that MDM2 oncogene possesses the chaperone activity. Prof. Żylicz presented first evidence that heat shock proteins are also directly involved in gaining new oncogenic functions of mutated p53 tumour suppressor, leading to tumour development, metastasis and acquisition of chemoresistance of breast cancer patients. Recently, he showed that expression of heat shock genes create a signature to predict the clinical outcome of breast cancer.

Prof. Żylicz is a full member of the Polish Academy of Sciences, member of the German National Academy of Sciences Leopoldina, Academia Europae and the European Cancer Research Academy, and corresponding member of the Polish Academy of Arts and Sciences. He is also a member of the European Molecular Biology Organization (EMBO), and was a member of its Council in 2003-2007. In 2008-2010 he chaired the Molecular and Structural Biology and Biochemistry Panel (LS1) of the European Research Council. He also served as the Polish delegate to the European Molecular Biology Conference (2000-2004) and the European Science Foundation (2003-2005). He was a member of the ERC Identification Committee (2010-2013). He was awarded an honorary doctorate from the Universities of: University of Wrocław (2007), University of Gdansk (2011) and Jagiellonian University (2013). He was a science advisor to the President of the Republic of Poland (2010-2015). Since 2012 he has been a member of Max Planck Senate.