



**Prof. Dr. G. J. Peters** (Updated February 2017)

Professor Godefridus (Frits) J. Peters is at the Laboratory Medical Oncology of the VU University Medical Center (VUmc) in Amsterdam (the Netherlands). He studied biology and chemistry at the University of Nijmegen, obtained his master's degree in biochemistry in 1977 and his Ph.D. in 1982 on the relation between inborn errors and immunodeficiency diseases. He did a post-doc at the Netherlands Cancer Institute in Amsterdam, and subsequently at the Free University Hospital (now VU University Medical Center) in Amsterdam. In 1986 he received a senior research fellowship of the Royal Netherlands Academy of Arts and Sciences, in 1989 he was appointed as head of the division of Biochemical Pharmacology, in 1998 as head of the division of Pharmacology and deputy-head of the laboratory and in 2003 as head of the Laboratory of the Department of Medical Oncology. He was appointed as associate-professor in 1992 and as full professor in 2003.

The research of Prof. Peters is focused on translation of preclinical pharmacology of anticancer agents to the clinic. Current drug classes studied include anti-signalling protein kinase inhibitors, often combined with antifolates, other antimetabolites, platinum analogs, topoisomerase inhibitors, and taxanes. A major research interest is the improvement of treatment of lung and gastrointestinal tumors, either by optimizing drug combinations, by using proper prodrugs or drug carriers, or by identification of resistance genes. For the latter, analysis of signalling pathways is performed, in relation to expression, mutations and genetic polymorphisms in driver genes, and regulation by miRNAs. Other research interests include regulation of transport (influx and efflux pumps), and metabolism of anticancer drugs, DNA repair, apoptosis and protein processing (proteasome, aminopeptidase, autophagy). These research fields are interconnected by studying the role of phosphorylation by various protein kinases on the function of these pumps (OCTs, MRPs, BCRP).. These studies are translated from model systems to the patient and back, in order to provide personalized therapy

Education is important in research, since well-educated researchers are the future of cancer research. Prof Peters supervised more than 25 Ph.D. students. Teaching varies from bachelor students at the Amsterdam University College, medical biology and pharmaceutical sciences, a Master in Oncology as well as postgraduate courses. Next numerous Bachelor and Master students from various disciplines and countries have done an internship in his group.

Prof. Peters has authored/co-authored >520 refereed research papers and reviews, and 165 papers/chapters in books and congress proceedings, he is/was member of 25 editorial boards, was founder and first president of the Purine and Pyrimidine Society (2003-2005) and is currently secretary of that group. He was chair of the EORTC-Pharmacology and Molecular Mechanisms (PAMM) Group from 2009-2015. Currently he is secretary of the EORTC-PAMM group and member of the EORTC-Translation Research Advisory Committee  
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