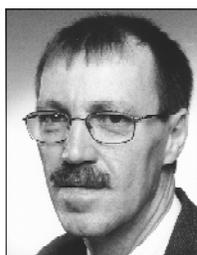




EMINENT SCIENTIST OF THE YEAR 2007 EUROPE



Prof. Dr. Godefridus (Frits) J. Peters

Prof. Dr. Godefridus (Frits) J. Peters, an internationally reputed scientist in the field of human pharmacogenomics, is currently working as head of the Clinical Research Laboratories of the department of Medical Oncology of the VU University Medical Center (VUmc) in Amsterdam (the Netherlands).

Prof. Peters 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 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 and in 1998 as head of the division of Pharmacology and deputy-head of the laboratory and in 2003 as head of the Laboratories of the Department of Medical Oncology. He was appointed as Associate Professor in 1992 and as full professor in 2003.

The major research interests of Prof.

Peters include all aspects of pharmacology of anticancer agents, with emphasis on antimetabolites, antifolates, platinum analogs, taxanes and more recently anti-signalling agents and third generation targeted-agents. His group was one of the first to describe the prognostic role of thymidylate synthase in the antitumor activity of 5-fluorouracil, and the first to describe the synergism between cisplatin and gemcitabine, now one of the standard combinations in the treatment of non-small cell lung cancer.

Prof. Peters group also described some of the self-potentiating actions of gemcitabine. At this moment one major research line focuses on the role of folate homeostasis not only in controlling the efficacy of antifolates, but also in controlling (and being controlled by) the expression of various multidrug-resistance associated proteins (MRPs) and breast cancer associated resistance protein (BCRP). His current research focuses on the role of genetic polymorphisms in drug metabolism and response to anticancer agents. This research not only limits itself to gene expression (e.g. with micro-arrays) but also to regulation of gene expression (methylation) and functional aspects (phosphorylation) of drug



metabolising enzymes, in order to use them as predictive markers in tailored therapy. The first study on the use of thymidylate synthase to select treatment was completed in 2003, in which it was shown that selection of patients based on gene expression increased response rate 2-fold.

Prof. Peters was/is member of the editorial board of several journals (International Journal of Purine and Pyrimidine Research (1989-1992), European Journal of Cancer (1995-), Oncology Reports (1995-1998), South-American Journal of Cancer (1998-), Electronic Journal of Oncology (1999-), Clinical Colorectal Cancer (1999-), Cancer Chemotherapy and Pharmacology (2000-), International Journal of Oncology (2001-), Cancer Therapy (2003-), Current Cancer Therapy reviews (2004-), Journal of Chemotherapy (2004-), Annals of Oncology (2005-), Journal of Pharmacology and Toxicology (2006-)),

(co)-edited 6 books, was guest editor of 5 special journal issues and has edited the proceedings of 5 meetings. He is regularly invited at several (international) meetings. He was member of the scientific committee of several international meetings on chemotherapy and translational research, and is member of the Scientific Advisory Board of several pharmaceutical companies and societies.

Prof. Peters also (co)-organized several Gene to Cure meetings in Amsterdam (on colon cancer (1995), pancreatic cancer (1999), esophageal cancer (2002)), an EORTC-PAMM (Pharmacology and Molecular Mechanisms) meeting (1999), a meeting on Chemotherapy of Colon Cancer (1999), the combined International/European meeting on Purine and Pyrimidine Metabolism (2003) and the 13th International Symposium on Chemistry and Biology of Folates and Pteridines (2005). He was president of the European Society for the Study on

Purine and Pyrimidine Metabolism in Man (ESSPPMM) and recently transformed this society into an international society, the Purine and Pyrimidine Society (PPS), is member of the committee of the EORTC-PAMM group and vice-chair of the Drug Development Committee of this group. Prof. Peters supervise (d) 20 Ph.D students and is chair of the examination committee of the newly established international (top)master oncology of the VUmc. Prof. Peters has (co)-authored 269 peer-reviewed papers, 65 invited book chapters/journal reviews and 100 congress papers. These (co-authored) papers have been cited >8000 times.

Prof. Dr. Godefridus (Frits) J. Peters has been selected by the World Scientist Forum for "Eminent Scientist of the Year 2007" International Award in the field of Cancer Research and Medical Oncology based on his research innovations in Genes and Pharmacogenomics.