

## First KIA Laureate Applied Research



Nationality: BelgianDate of birth: 1941

Position: Active Emeritus Professor

Scientific affiliation: Rega Institute for Medical Research

University of Leuven, Belgium

Project title: Discovery of antiviral drugs



Abstract: Prof. Erik De Clercq's achievements are mainly focused on the development of compounds for the treatment of virus infections, including virtually all major viral pathogens [HIV (human immunodeficiency virus) infections (AIDS), HBV (hepatitis B virus) infections (hepatitis B) and HCV (hepatitis C virus) infections]. HIV, HBV and HCV, taken together, account for more than 500 million chronically infected patients worldwide. Erik De Clercq has also laid the basis for the development of compounds effective against acute virus infections such as herpes simplex virus (HSV) and varicella-zoster virus (VZV), with which 10% of the world population is assumed to be confronted at least once in their life time. De Clercq's present research efforts also focus on other influenza (including avian influenza), poxviruses (i.e. smallpox), human herpesvirus type 6, human cytomegalovirus and the hemorrhagic fever and encephalitis viruses (Dengue, Yellow fever, Chikungunya, tick-borne encephalitis, West Nile encephalitis, etc.). He has (co)-discovered a number of antiviral drugs, currently used in the treatment of HSV infections (valaciclovir, Valtrex®, Zelitrex®), VZV infections (brivudin, Zostex®, Brivirac®, Zerpex®), CMV infections (cidofovir, Vistide®), HBV infections (adefovir dipivoxil, Hepsera®; tenofovir disoproxil fumarate, Viread®), and HIV infections (AIDS) (tenofovir disoproxil fumarate, Viread®, Truvada®, and Atripla®).

**Biography:** Prof. Erik De Clercq, M.D., Ph.D. has been Chairman of the Department of Microbiology and Immunology of the Medical School at the Katholieke Universiteit Leuven (K.U.Leuven) as well as Chairman of the Board of the Rega Institute for Medical Research (until September 2006). He is currently President of the Rega Foundation and a director of the Belgian (Flemish) Royal Academy of Medicine, a member of the Academia Europaea and Fellow of the American Association for the Advancement of Science. He has been teaching the courses of Cell Biology, Biochemistry and Microbiology at the K.U.Leuven Medical School, until September, 2006 (when he was forced to retire) and is still allowed to teach part of the Biochemistry course at the K.U.Leuven Campus Kortrijk.

Prof. De Clercq received in 1996, the Hoechst Marion Roussel (now called "Aventis") Award (American Society for Microbiology), and in 2000 the Maisin Prize for Biomedical Sciences (National Science Foundation, Belgium). He is a honorary doctor of several universities [i.e. Ghent (Belgium), Athens (Greece), Ferrara (Italy), Shandong (Jinan, China) and Charles University (Prague, Czech Republic)]. In 2008, he was elected European Inventor of the Year (Life time achievement award).