

[Check against delivery.]

**Prof. Dr. Joachim Hauber**

[Address],

It is a particular honour for me today to be able to award the 2009 Robert Koch Medal in Gold to Prof. Volker ter Meulen, Emeritus of Clinical Virology and Immunology at Julius Maximilians University Würzburg and President of the German Academy of Sciences Leopoldina.

Volker ter Meulen was born in Osnabrück in 1933. Until 1960, he studied medicine at the Universities of Münster, Innsbruck, Kiel and Göttingen, where he also did his doctorate. In the mid-1960s, he deepened his medical education in the field of virology as a staff member of the Department of Virology at the Children's Hospital of Philadelphia in the USA, and until the early 1970s in the field of paediatrics, chiefly at the University Children's Clinic in Göttingen. Both fields, paediatrics and virology, were to set important impulses in Volker ter Meulen's further career. Following his "Habilitation" (qualification as a university lecturer in Germany) and his being awarded the *Venia legendi* for Paediatrics and Clinical Virology, as well as further research stays in the USA in Philadelphia und Berkeley, Volker ter Meulen 1975 was appointed Full Professor of Clinical Virology at the University of Würzburg. As a tenured professor at the newly established chair, he developed molecular virology there. As Director and Emeritus, he has remained loyal to the University of Würzburg and the Institute of Virology and Immune Biology for more than three decades up to this day, in spite of a wide range of attractive offers.

Volker ter Meulen is one of the leading founders of molecular biology virus research and a pioneer of neurovirology. Over the past 35 years, his scientific activities have concentrated on research into virus infections of the central nervous system, and here in particular on issues of persistence and pathogenicity. In addition to examinations on coronary viruses and immune deficiency viruses among monkeys, his scientific interest has focused in particular on infections with measles viruses. Volker ter Meulen played a crucial role in identifying the measles virus as the causal pathogen of subacute sclerosing panencephalitis (SSPE) and inclusion-body encephalitis (MIBE), i.e. of the most serious inflammatory diseases of the brain, which result in massive damage and are fatal. His further detailed molecular biology examinations supplied crucial insights on which viral and cellular mechanisms are at work in establishing persistent infections in neuronal tissues. Volker ter Meulen also developed a rat animal model with the aid of which the immunological reactions and pathogenetic processes at the beginning of the infection can be analysed with optimum precision. These surveys provided experimental proof for the first time that viruses can induce anti-immune diseases.

Over the past years, Volker ter Meulen and his team conducted a detailed analysis of the molecular mechanisms that enable measles viruses to inhibit the human immune system. Here, examinations aimed at identifying and establishing the function of immune cell surface receptors were at the centre of studies. In the context of this work, again with the aid of various rodent models, the cellular measles viruses were functionally characterised. It was revealed that the virus receptors play a crucial role in inhibiting the immune system, and furthermore, that the measles virus sheath protein, which is expressed on the surface of infected cells, i.e. appears there, inactivates neighbouring T-lymphocytes. This was the first explanation of the effect observed in patients of only slightly infected cells being capable of negatively influencing many neighbouring immune cells.

Volker ter Meulen's central research topic, the infection of nervous tissue and the pathophysiological processes related to it, is also continued in his studies on monkey immune deficiency viruses and with rhesus makak monkeys infected with viruses. These resulted in

new insights regarding neuronal malfunction and neurodegeneration in infections with immune deficiency viruses, including the AIDS pathogen HIV.

Volker ter Meulen's scientific achievements are reflected in several hundred publications. He has received several high-ranking academic honours. Here, I would only like to mention the Max Planck Research Prize 1992, the Pioneer Award of the International Society of Neurovirology 2000, the 2000 Emil von Behring Prize and the 2003 Ernst Jung Medal for Medicine in Gold. Volker ter Meulen is bearer of the Bavarian Maximilian Medal for Science and Art, and in 2008, he became Honorary Doctor of the Medical Faculty at Freiburg University.

This is one side of the medal.

The Robert Koch Medal in Gold is awarded to honour a person's comprehensive lifework. In addition to the excellence of his academic achievements, Volker ter Meulen's years of activity in the social and science policy field deserve to be mentioned, too. This is, as it were, the other side of the medal.

Volker ter Meulen has been, and still is, on countless national and international committees. He has advised or headed various universities, faculties, research organisations, expert societies, foundations and authorities, including the World Health Organisation (WHO) and a wide range of State and Federal Ministries.

In 2003, Volker ter Meulen was elected President of the "German Academy of Sciences Leopoldina". It is above all thanks to his personal efforts, skills and visionary influence that the Federal Government declared the Leopoldina "National Academy of Sciences" on the 14<sup>th</sup> July 2008. It has since been responsible for scientific policy consulting in Germany.

Finally, in 2007, Volker ter Meulen was elected Chairman of the European Sciences Advisory Council (EASAC), which represents the national science academies of the EU Member States and conducts policy consulting at European level.

Volker ter Meulen has also been honoured several times for his social activities. Here, as examples, I would like to mention the Cross of Merit on Ribbon of the Order of Merit of the Federal Republic of Germany in 1992 and the Bavarian Order of Merit 2000, the highest Order of Merit of the Free State of Bavaria.

Volker ter Meulen is known to always present his convictions with a clear voice and with emphasis. This might not always be popular, but is all the more important. For this, too, dear Mr ter Meulen, you deserve our highest respect.

Ladies and Gentlemen,

It is a great honour for the Robert Koch Foundation to award the 2009 Medal in Gold to Prof. Volker ter Meulen.