

Curriculum Vitae Prof. Dr. Webster K. Cavenee



Name: Webster Cavenee
Born: 12 September 1951

Main areas of research: Genetic cancer research, oncology, brain tumours, tumour suppression, glioblastoma

Webster K. Cavenee is a US American pioneer of genetic cancer research. He provided the first indisputable evidence for the existence of a gene that was responsible for the suppression of tumours, a so-called Tumour Suppressor Gene.

Academic and Professional Career

- 2003 - 2015 Director of the Ludwig Institute for Cancer Research, San Diego, USA
- since 1991 Distinguished Professor, University of California, San Diego, USA
- 1986 - 1991 Director of the Ludwig Institute for Cancer Research and Professor for Medicine, Neurology, Pathology und Humane Genetics, McGill University, Montreal, Canada
- 1983 - 1986 Assistant Professor, then Associate Professor for Microbiology und Molecular Genetics, University of Cincinnati, USA
- 1981 - 1983 Associate at the Howard Hughes Medical Institute, University of Utah, Salt Lake City, USA
- 1979 - 1981 Visiting Researcher at the Center for Cancer Research of the Massachusetts Institute of Technology (MIT), Cambridge, USA
- 1977 - 1979 Postdoctoral Fellow, the Jackson Laboratory, Bar Harbor, USA
- 1977 PhD at the University of Kansas Medical School, Manhattan, USA
- 1973 Bachelor of Science in Biology, Kansas State University, Manhattan, USA

Functions in Scientific Societies and Committees

2002	Member of the Advisory Board of the General Motors Cancer Research Foundation
2002	Chair of the Executive Committee of the World Alliance of Cancer Research Organizations, Philadelphia, USA
1998	President of the American Association for Cancer Research
1994 - 1997	Member of the Board of Directors of the American Association for Cancer Research

Project coordination, Membership in collaborative research projects

since 2015	Director of Strategic Alliances in Central Nervous System (CNS) Cancers, Ludwig Institute for Cancer Research, San Diego, USA
------------	---

Honours and Awarded Memberships

since 2017	Member of the Chinese Academy of Engineering
since 2012	Member of the German National Academy of Sciences Leopoldina
since 2008	Member of the American Association for the Advancement of Science (AAAS)
since 2007	Member of the Institute of Medicine (now National Academy of Medicine)
2007	Princess Takamatsu Award (AACR)
2007	Albert Szent-Györgyi Prize, National Foundation for Cancer Research, USA
since 2003	Member of the National Foundation for Cancer Research, USA
since 1997	Member of the American Academy of Microbiology
since 1997	Member of the US-National Academy of Sciences
1994	Farber Award of the American Association of Neurological Surgeons
1990	Charles S. Mott Prize of the General Motors Cancer Research Foundation, USA
1988	Rhoads Prize for excellent contributions to cancer research

Major Scientific Interests

Webster K. Cavenee is a US American pioneer of genetic cancer research. He provided the first indisputable evidence for the existence of a gene that was responsible for the suppression of tumours, a so-called Tumour Suppressor Gene.

Already as a postgraduate student Webster Cavenee was able to bring about an extraordinary breakthrough by producing the first indisputable evidence of the existence of a so-called Tumour

Suppressor Gene. These genes normally control the cell cycle and programmed cell death by means of specific proteins. A mutation of one such gene increases the probability of a tumour forming and the onset of cancer.

Cavenee's further research work is closely linked to the US American Ludwig Institute for Cancer Research. As a professor and Director of the Ludwig Institute in San Diego he focussed his research on a particularly aggressive type of brain tumour in adults: the glioblastoma, which is thus far considered incurable. Webster Cavenee described the formation, function and attributes of an important growth factor receptor, the mutated form of which fosters the development of such tumours. A team led by him developed an antibody against the mutated receptor and that has developed into a promising therapy against glioblastoma.

Cavenee ended his role as the Director of the Institute in 2015 but continues his scientific work. He since coordinates an international research alliance that consists of about 130 clinical researchers and basic researchers from the USA, China, Australia and Europe. The goal of the alliance is to promote and advance new clinical testing methods for the purpose of developing therapies against glioblastoma.