

Born in Helsinki, Finland, December 1, 1942.

M.D., University of Helsinki, 1968.

Doctor of Medical Science, University of Helsinki, 1971.

Docent in cell biology, 1974, University of Helsinki.

Professor of Biochemistry, Åbo Akademi (University in Åbo, teaching in Swedish), 01.01.1979–31.03.1981.

Professor of Biochemistry and Chairman, Division of Biochemistry, Department of Biosciences, University of Helsinki, 1.4.1981–31.12.2010.

Professor emeritus, Division of Biochemistry and Biotechnology, Department of Biosciences, University of Helsinki, 1.1.2011–

Research Professor of the Academy of Finland, 1986–1991.

Postdoctoral fellow, University of Washington, 1972–1974 (S. Hakomori).

Visiting professor, La Jolla Cancer Research Foundation, 1988–1989 (E. Ruoslahti).

Permanent secretary, Finnish Society of Sciences and Letters, 1992–.

The research has been funded continuously by the Academy of Finland since 1975.

Presently 300 international publications, many of which in the best possible journals including Nature, Nature Biotechnology, Nature Immunology, Nature Medicine, Science, Science Signaling, Mol. Cell., J. Biol. Chem., EMBO J., Blood, Proc. Natl. Acad. Sci., J. Immunol., J. Exp. Med., Biochemistry etc.

The work has been cited more than 13.200 x, one of the highest citations in Finland; h-index: 64.

Membership in scientific academies and similar organizations

European Molecular Biology Organization (EMBO), 1980–. Member of its Council 1986–91. Finnish Academy of Sciences, 1982–.

Finnish Society of Sciences and Letters, 1983–.

World Cultural Council, 1984–. Founding member (total 124 founding members including 25 Nobel laureates).

Academia Europaea, 1989–.

World Innovation Foundation. Honorary member, 2003.

The Royal Swedish Academy of Sciences, 2007–.

The Royal Society of Arts and Sciences in Göteborg, 2008 –.

Activity in scientific organizations.

The Finnish representative in FEBS (Federation of European Biochemical Societies) 1986–1996, and in IUBMB (International Union of Biochemistry and Molecular Biology) 1987–1996.

Nordic Committee on Biochemistry 1984–1996.

Delegate in the International Council of Scientific Unions 1993–98.

Vice-chairman of the Delegation of the Finnish Academies of Science 1992–98.

Chairman of the organizing committee of the Science Days in Finland 2001,

Chairman of the Finnish Medical Association 2000–2001.

European Research Council, member of Advanced Grants selection committee, 2008, 2010 and 2012 (LS1).

Appointed by the Karolinska Institutet to evaluate the handling of the Macchiarini case, 2016.

Prizes and honours:

- The Komppa award for the best thesis in chemistry in Finland (1971).
- The Scandinavian Anders Jahre Prize in Medicine, University of Oslo (1981).
- The 150-year Anniversary Prize of the Finnish Medical Association (1985).
- Professor of the year in Finland (1995) (all fields included).
- The Äyräpää Prize of the Finnish Medical Association Duodecim (1997).
(the most important prize in medicine in Finland)
- The silver medal of the Finnish Society of Science and Letters (2002).
- The silver medal of the University of Helsinki (2002).
- Commander of the Order of the Finnish Lion (2002).
- Chevalier d'Ordre des Palmes Académique (France) (2009).
- The J. W. Runeberg Prize of Finnish Medical Association (Finska läkaresällskapet)(2010).
- Honorary member of Finnish Medical Association (2010).-
- Honorary member of Nylands Nation (2011)
- Commander of the White Rose of Finland (2012)
- One of Finland's 100 most prominent scientists through all times Otava publishing company(2014)