

Bernard Mach, MD, PhD, Brief Resume

A Swiss citizen, Bernard Mach was born in Geneva, obtained his MD degree from the University of Geneva Medical School (1957) and, following internship and residency in Medicine at the Mass. General Hospital (Harvard Medical School) in Boston (1958-60), obtained a PhD in molecular genetics from the Rockefeller University in New York, under Nobel laureate Ed. Tatum (1965).

He was then research fellow at the University of Geneva (Dept of Molecular Biology and Dept of Pathology) until he became Chairman of the Dept of Microbiology (1977). He remained at the University of Geneva Medical School until 1998, where he was the Louis Jeantet Professor of Molecular Genetics, Chairman of the Department of Genetics and Microbiology and Founder and Chairman of the Graduate Program in Molecular and Cell biology.

His earlier research was first on the biosynthesis of peptide antibiotics, then in Molecular Immunology, on the origin of antibody diversity and on the genetic diversity, polymorphism and regulation of MHC Class II genes (also called "Immune Response Genes").

An important achievement from B. Mach (with colleagues François Rougeon and Philippe Kourilsky) was the 1975 discovery of the Cloning of Genes from their mRNA and cDNA, a novel technology that made possible gene cloning in all eukaryotes and that provided the basis for modern Biotechnology, for the production of Recombinant Proteins and for the exploration of the Genome.

He was elected a foreign Member of the French Academy of Sciences in 1995.

Although he has spent most of his professional life in academia, B. Mach has also been active as an advisor and consultant in the Life Sciences area and as an entrepreneur. B. Mach was a member of the Swiss Science Council, the scientific advisory board to the Swiss government (1969-1980), was president of the Union of Swiss Societies for Experimental Biology and was a member of the French National Science Council (1998-2002). He has frequently spoken and written about the "translation" of innovation from the public sector into industrial and commercial development and also on job creation through novel innovative companies. B. Mach was a founder, SAB member and director of Biogen (from 1977 to 1991), then a member of the Board of Serono (Geneva), of Lonza Group (Basel) and was on the board of several Biotech companies.

Since 1995, B. Mach has also been active in the field of investment in Life Sciences, first as founder and Chairman of the Lombard Odier Immunology Fund and then as partner in Aravis Venture Fund.

B. Mach is the founder and honorary chairman of NovImmune SA, a Geneva-based private biotech company developing "best in class" therapeutic monoclonal antibodies in the field of inflammation and immune related diseases and with several products in clinical development. NovImmune also develops fully human bi-specific antibodies.

He has recently co-founded an oncology company, MaxiVAX SA, dedicated to primary immunotherapy of various types of cancer, with a novel and effective procedure that allows the boosting of the patient's own immune response against his/her cancer cells. MaxiVax is now conducting Phase I clinical trials and is preparing Phase II trials for 2015.

B. Mach is also on the board of FIND, a Geneva-based non-profit foundation developing novel innovative diagnostics for developing countries, bringing high-tech robust and affordable diagnostics to low tech and poor areas of the world. A major contributor to FIND is the B. & M. Gates Foundation.