



EUROPEAN  
COMMISSION

Community Research

## EU-FUNDED RESEARCH PROJECT

### Designing a nasally administered universal influenza vaccine (Universal Vaccine)

**Time of action:** UNIVERSAL VACCINE started in June 2005

**EU budget (funding):** €1.2 million

One of the biggest challenges concerning influenza vaccination is trying to keep up with the virus' mutational variation. The currently approved vaccines work by stimulating the body's immunity against the haemagglutinin and neuraminidase proteins on the virus' surface. As these proteins are prone to mutation, vaccines only induce immunity against specific subtypes of the virus.

However, the influenza virus has a third protein in its outer coat, M2 and the extracellular domain of this protein, M2e, has been remarkably conserved in the amino acid sequence since human influenza virus was first isolated in 1933. This project is therefore working towards the possibility of developing a universal vaccine based around the M2e domain. If clinical trials prove successful, the vaccine will not only help to diminish the social and economic costs of influenza, but also secure the future growth of the European vaccine industry.

Project Coordinator is Dr. Björn Löwenadler