

Over the past century, the Medical Research Council has been at the forefront of scientific discovery to improve human health. **Key discoveries related to viruses include:**

- 1933** **Discovery of the influenza virus**
MRC scientists proved that influenza is caused by a virus, rather than a bacterium, after studying ferrets.
- 1947** **Influenza monitoring centre set up**
The MRC National Institute for Medical Research monitors flu strains worldwide – in 2009 it played a key role in efforts to counter the H5N1 'swine flu' epidemic.
- 1957** **Discovery of interferon**
Interferon proteins are used today to treat hepatitis, cancer and multiple sclerosis.
- 1975** **Monoclonal antibodies developed**
Isolating and producing unlimited numbers of individual, or monoclonal, antibodies is a powerful tool in medical research.
- 1980** **Babies vaccinated against pneumococcus**
In developing countries pneumococcus bacteria are responsible for around one million child fatalities every year - a vaccine developed by MRC scientists reduced deaths by 16%.
- 1980-1989** **Humanised monoclonal antibodies developed**
'Humanised' monoclonal antibodies are better suited to medical use. Monoclonal antibodies now form the basis of a third of all biotechnology products in development.
- 1981** **Structure determined of the proteins flu uses to stick to cells**
Work to reveal the 3D structure of influenza haemagglutinin, the proteins that allow the virus to stick to cells and infect them, may help in designing new antiviral drugs.
- 2002** **Haemophilus influenzae type B (Hib) disease eradicated in The Gambia**
MRC research in The Gambia led to a national vaccination programme that wiped out Hib, one of the main causes of pneumonia and meningitis in children in developing countries.
- 2003** **Mystery of how Spanish flu jumped from birds to humans solved**
MRC investigators used X-ray crystallography to solve the 85-year-old mystery surrounding the world's most lethal flu outbreak.

See the full Centenary Timeline at:
<http://www.centenary.mrc.ac.uk/>