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## General Discussion

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*Phil. Trans. R. Soc. Lond. B* 1983 **303**, 227

doi: 10.1098/rstb.1983.0096

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## General discussion

D. A. J. TYRRELL, F.R.S. (*M.R.C. Common Cold Unit, Salisbury, U.K.*). Several papers have emphasized the importance of studying the real target cells and of the need for biological assessment on genetically manipulated organisms. I should like to emphasize the value of organ cultures of target tissues for this purpose. We have used respiratory epithelium, but I have done pilot experiments on skin and squamous epithelium which, I am sure, could be more fully exploited, and although organ cultures of intestine are unsatisfactory the biochemists make great use of dissociated enterocytes and we should try and do the same.

H. E. LARSON (*Division of Communicable Diseases, Clinical Research Centre, Harrow, U.K.*). There is now considerable evidence that influenza viruses alter non-specific defences in the host by affecting the function of polymorphonuclear leucocytes. Mixing of virus and cells *in vitro* diminishes the ability of polymorphs to move and to phagocytose (Larson *et al.* 1977). Some investigators have found that chemiluminescence and bacterial killing are also reduced (Abramson *et al.* 1982). Susceptibility of infant rats to *Haemophilus influenzae*, septicaemia and meningitis can be increased by previous inoculation with influenza virus (Michaels *et al.* 1977). The capacity of a series of virus strains to alter susceptibility correlates generally with the experimental pathogenicity of these viruses in man (Michaels *et al.* 1978). Finally, patients with infections caused by influenza virus, and volunteers given some live experimental influenza virus vaccines, suffered temporary impairment of chemotaxis of polymorphonuclear leucocytes (Larson *et al.* 1980). There is no information on the mechanism by which this occurs.

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