

Introductory remarks

Welcome to The Royal Society's Discussion Meeting, *Origins of HIV and the AIDS epidemic*.

The Royal Society holds international Discussion Meetings on frontier topics, which are proposed by Fellows and others. The HIV meeting was proposed by the late Bill Hamilton so that there could be a discussion of the controversial hypothesis that HIV entered the human population through trials of an oral polio vaccine (OPV). From the outset it was agreed that this would be done in a wider context, such as virus cross-species transmission (in particular, from animals to man), virus evolution and public health.

Owing to a misunderstanding of the purpose of the meeting, and because of the dissension and emotion aroused by the hypothesis, we found it impossible to arrive at a well-balanced set of speakers in time for the original set date of the meeting in May 2000. Moreover, we learned that additional data would become available within the next few months, highly relevant to the OPV controversy. These included the results of independent, blinded testing of remaining oral polio vaccine stocks, further evidence on the prevalence of a related virus in chimpanzees, and forthcoming major publications on the evolution and rate of change of HIV. For these reasons we postponed the Discussion Meeting until September 2000, the first available slot in our Lectures and Meetings programme.

I refute assertions made earlier this year that the postponement was 'an attempt . . . to load the dice' in favour of one of the parties to the OPV debate. The Royal Society does not shirk from tackling important scientific issues, but we have always tried to ensure that, on controversial matters, the protagonists be fairly represented, and this is the case in our meeting. We thank Robin Weiss and Simon Wain-Hobson for continuing to organize this meeting amidst rather trying circumstances.

As is usual at Discussion Meetings, we have invited the science press and also, because of the wide interest aroused by the much reported controversy, we shall be holding a press conference later today. By this time, some of the major protagonists on the two sides will have spoken.

As you all know, Bill Hamilton died aged 63 in March this year, probably from malaria contracted on the visit he made to the Congo to test the hypothesis that the origin of the human AIDS epidemic lay with the trials of polio vaccine conducted there. This last expedition was typical of the man—like Darwin, he was a naturalist first, and like him he will be remembered for his major contributions to evolutionary theory, in particular to the genetical evolution of social behaviour. His colleague Professor Sir Robert May will speak in his memory.

If I may quote from Hamilton's first paper on the subject in the *American Naturalist* in 1963 on the evolution of altruistic behaviour, he writes of a hypothetical gene *G* responsible for some such kind of behaviour. 'The ultimate criterion which determines whether *G* will spread is not whether the behaviour is to the benefit of the behaver, but whether it is to the benefit of the gene *G*.' Here you have the first clear enunciation of the concept of what was later called the 'selfish gene' and, moreover, also the beginnings of the concepts of kin selection and inclusive fitness. He was a great man. I ask you all to stand for a minute's silence in memory of William Hamilton.

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