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*From the Biological Secretary and Vice-President Professor DJ Read FRS*

Dear Mr Shaw

Please find enclosed the Royal Society's response to the Committee's call for evidence for the inquiry into 'Human Reproductive Technologies and the Law'. The Society's response has been produced in consultation with the Royal Society's ad hoc working group on stem cells and cloning. The Royal Society takes an active role in policy discussions on the use of stem cells and therapeutic cloning in research, and we welcome the invitation to respond to this call for evidence.

The Royal Society has produced several statements on stem cell research and therapeutic cloning, which are enclosed for your reference. The Royal Society has participated in a number of Government consultations and inquiries that have helped to shape the existing legislative framework, and continues to support the legislation's aims to permit legitimate uses of cloning technology in research and therapy while outlawing any attempts to carry out human reproductive cloning, prohibited under legislation established in December 2001.

In our evidence to the House of Lord's ad hoc committee on stem cell research in June 2001, we reiterated that the potential applications of adult or embryonic stem cells to provide radical new therapies should be pursued urgently and in parallel. This is based on the objective scientific viewpoint that both sources of stem cells have potential for future forms of cell therapy, and that further research is needed to establish what therapeutic benefits their use might yield. We believe that it is important that the UK remains at the forefront of research and development in the field of stem cells and cloning, and that this position should be maintained through appropriate regulation in the private and public sectors, which should be devised in consultation with the scientific community and other stakeholders.

With regard to the Society's position on current research technologies, we are aware that since our last statement there have been advances in this area. Of particular interest are the alternative sources of germ cells and the use of immature gametes for achieving parthenogenetic development to term and fertilisation via intracytoplasmic sperm injection (ICSI). Use of all variants of ICSI in human assisted reproduction obviously requires careful monitoring. At present, it is too early to say whether so-called 'synthetic' eggs and sperm obtained by the in vitro differentiation of embryonic stem cells will provide an alternative source of functionally normal gametes. Clearly, further developments in this area need to be followed closely. However, we do not feel at this time that these recent developments raise any additional ethical or scientific issues that are not adequately addressed in the existing legislation.

As a final point, we wish to bring to the Committee's attention the concern of the research community over the current consultation by the HFEA on licensing fees for research projects. This, if implemented, would involve a substantial increase in the fees for licensing and subsequent renewal of research licenses that does not take account of the nature of the work. A number of laboratories conduct basic research that often involves no associated clinical work, and are thus unable to pass on the licensing costs. Consequently, there is a danger that prohibitive start-up costs may deter researchers from pursuing important basic studies in this area. Hence proposed licensing arrangements are liable to stifle rather than promote basic stem cell and related research in the UK.

Should you wish any clarification or expansion of our views we would be happy to respond to any written queries and also to provide oral evidence to the Committee.

Yours sincerely

David J Read