

In 1997 and 1998, cloning was the subject most often featured and headlined in Spanish newspapers. However, since all types of cloning —whether mad-scientist (R. Seed), foolish (introducing oral cells into cow's oocytes), farming (artificial twinning) or industrial (transgenics), and either with embryonic stem (ES), germ (EG) or adult cells (with Dolly as a paradigm— were similarly treated by the media, it became difficult for the average citizen to draw conclusions on the advantages or disadvantages, the dangers, if any, and the legal and ethical issues involved in each cloning strategy.

In general, the public believes that cloning procedures are forbidden. However, neither the Spanish Penal Code of 1995 nor the European Protocol signed in Oviedo in 1997 forbid the use of cloning techniques. Fortunately for the advancement of science, what is banned is the production of identical individuals, sharing the same nuclear genetic information. Had cloning techniques been outlawed, the development of recent methods to produce ES cells, with their incredible potential for the future of tissue and organ transplantation would have been impossible.

Taking into account the high degree of sensitivity of western societies toward these problems, the Institut d'Estudis Catalans decided to organize, in April 1998, within its programme of Jornades Científiques, a seminar, open to all kinds of public, to try to shed some light on the subject of cloning. The title of the seminar, «Responses to Human Cloning», clearly indicates the aims of the meeting.

In the first session, internationally renowned experts discussed the scientific basis of cloning and its possible use in farming and in human assisted reproduction techniques. Of especial interest was the discussion on new strategies to modify the programme of already committed or differentiated cells. A clear distinction was also established between non-reproductive (considered as acceptable) and reproductive (in general deemed unacceptable) cloning.

In the next two sessions jurists, ethicists and philosophers were asked to answer a rather difficult question: what would be the response from their fields of specialization if it became known that human cloning had already taken place successfully? No doubt, their opinions and

thoughts will be most stimulating to all those interested in this controversial subject, which has awakened so many fears and so many hopes deep in the heart of our society, still too suspicious of what is nothing but a further step in science, but is presented to the public as a dramatic and dangerous development.

I want to thank Dr. Françoise Shenfield, who shared with me the responsibility of organizing this meeting and of editing the manuscripts; Drs. Mercè Durfort, Maria Casado and Josep González-Agàpito who chaired the sessions on the biological basis of cloning, its legal implications and its ethical consequences respectively, and contributed with their opinions to a lively discussion of each paper; Dr. Josep Enric Llebot, Ms. Neus Portet and the staff of the IEC, who took care of the logistics of the seminar and of the publication of its proceedings; Mr. Carl MacGabhann for his careful translation of some of the papers; and all the speakers, for accepting the invitation of the Institut d'Estudis Catalans.

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