

Finding the right questions to ask about the lives of human clones

Child-development experts may have useful information.

Sir — I welcome Lee Silver's call in his Words essay "What are clones?" (*Nature* 412, 21; 2001) for an informed public debate on human reproductive cloning, but I question his proposed basis for the discussion. Silver concludes that a person produced by nuclear transfer would be "a unique and unpredictable child who had the same DNA sequence as someone else, but nothing more".

I disagree with his implication that a clone would necessarily have the same opportunity for individual development as a child produced by sexual reproduction. The reasons most commonly suggested for producing a clone are to overcome infertility or to replace a dead child. In the first case, the clone would be produced from one of the parents; in the second it would be from a child lost in an accident or after illness. The clone would be physically very similar to the original and have quite a similar personality, because of their shared inheritance. There would be greater similarity to the original in both regards than to any other person except an identical

twin born at the same time as the original.

It seems inevitable that this unusual similarity and the reasons for the production of the clone would influence relationships formed by the child throughout its lifetime. If the original was a dead child in the same family, there is no doubt that the parents wish "to use cloning to bring dead children back to life", as noted by Silver. What then would be the effect — not only on parents, but also on relatives, friends, school teachers and other children — of expectations that the clone would grow up like the original? If a parent were the original, would they have unusual and unreasonable expectations as to how the clone should develop? As the parent aged, how would the cloned child then react to seeing its physical future?

It is concern over these issues that makes me and many others reject the suggestion of cloning a person. The views of those who have studied child development would be very welcome.

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Why are Indian journals' impact factors so low?

Sir — Despite several limitations, impact factors — produced by the Institute for Scientific Information (ISI) — remain the most widely used, globally acceptable tools to evaluate the quality of journals and research publications. We have looked at the impact factors of Indian journals and find that, for 1999, only 47 journals figured in the ISI's list, all with impact factors of less than 0.6. Of the 5,500 journals from other countries in the ISI's list, 2,286 have impact factors greater than one, including 44 with impact factors greater than 10 and 20 with impact factors greater than 17.

For a country with more than a billion people, a large infrastructure for science and technology, and plenty of scientists, this picture of journal quality is dismal.

Is the coverage of journals for developing countries by the Science Citation Index (SCI) adequate? Is the ISI's monopoly contributing to the problem by restricting coverage or introducing an regional bias, for example between developed and developing countries? The criteria for inclusion in SCI are not known. We have made enquiries to the Indian

National Scientific Documentation Centre (INSDOC), to the National Institute of Science, Technology and Development Studies, to editors of prominent biomedical Indian journals and to other organizations. These have revealed that no Indian agency is involved in analysing these issues at present, though INSDOC has plans to do so.

The response to the questionnaire we sent to these organizations and journals (with a few exceptions, including INSDOC and the *Indian Journal of Medical Research*) was poor, indicating indifference. Most researchers publish their high-quality research in foreign journals with high impact factors, which exacerbates the problem. But they cannot be blamed for this. Administrators use impact factors in making assessments for promotion, recognition, honours and awards. Most official forms for job or grant applications have separate columns for the number of papers published in national and in international journals. An outstanding piece of research published in a less well-known journal might go unnoticed, depriving the author of due recognition.

Is the quality of our publications as poor as it seems? Are impact factors giving a true picture? The reasons for the situation in India must be properly

investigated and remedial measures sought. If scientists, journal editors and learned societies take the initiative in calling for such investigation, this objective will be achieved more quickly.

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Genome helpdesk site keeps information public

Sir — The European Molecular Biology Laboratory (EMBL), with additional support from the UK Medical Research Council and the Wellcome Trust, has established a new genome helpdesk, <http://www.ensembl.org>, at the European Bioinformatics Institute (EBI). The EBI is the primary provider of public genome-sequence data within Europe. The US National Institutes of Health has expressed its strong support for the EBI helpdesk, which will complement the existing service, <http://www.ncbi.nlm.nih.gov/genome/guide>, at the US National Center for Biotechnology Information (NCBI).

Together, these initiatives will ensure that the vast potential of the publicly funded genome-sequence databases is fully exploited and freely available for all to use.

The NCBI helpdesk answers more than 300 queries each day from scientists and is an invaluable guide for navigation of the publicly available genome databases. Together with the new EBI site, users will have easy access to an unsurpassed collection of genome sequences and tools for their interpretation. Both helpdesks are staffed by expert teams and rapidly answer queries by e-mail as a public service, available without restriction. It adds to a range of resources provided freely by the EBI and NCBI for commercial and academic scientists to maximize the potential of the public genome databases. These resources are continuously being refined and improved as new genome data are added.

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