ADDENDUM

doi:10.1038/nature05366

Human embryonic stem cell lines derived from single blastomeres

Irina Klimanskaya, Young Chung, Sandy Becker, Shi-Jiang Lu & Robert Lanza

Nature 444, 481–485 (2006); doi: 10.1038/nature05142 (this issue)

At the request of the Editors at *Nature*, we wish to clarify some questions that have arisen since the advance online publication (AOP) of our Letter on 23 August 2006. In our Letter, we showed that human embryonic stem-cell lines can be generated from a single cell after its removal from an 8–10-cell embryo. To minimize the number of embryos used, we removed multiple cells from each embryo, and none of the biopsied embryos were allowed to develop in culture.

In our experiments, the isolated blastomeres from each embryo were cultured together in the same medium that was used to culture the parent embryo, and were arranged to avoid contact with each other. Diffusible factors from the other blastomeres present in the media may assist recovery and growth of the blastomere. We have not excluded the possibility that only a subset of blastomeres of an 8–10-cell embryo are capable of forming human embryonic stem cells. These caveats are worth considering for future studies, but do not negate our central finding that blastomeres extracted from an 8–10-cell embryo by mechanical micromanipulation can form human embryonic stem-cell cultures.

We have now added more explicit information on how individual embryos were handled in the form of a table based on Supplementary Table 1 of the AOP version of the Supplementary Information (which has now been removed). This information is now presented in the printed paper as Table 1, to indicate how many cells were individually biopsied from each embryo. In addition, the descriptions for Fig. 4b and d in the legend to Fig. 4 have been corrected (they were inadvertently transposed in the AOP version of the paper).

These clarifications have been incorporated into the paper for the print version and are individually listed as Supplementary Information to this Addendum.

Supplementary Information is linked to the online version of the paper at www.nature.com/nature.

CORRIGENDUM

doi:10.1038/nature05400

Insights into social insects from the genome of the honeybee *Apis mellifera*

The Honeybee Genome Sequencing Consortium

Nature 443, 931–949 (2006)

In this Article, the surname of co-author L. Sian Gramates was misspelled Grametes.

CORRIGENDUM

doi:10.1038/nature05423

Potential of stem-cell-based therapies for heart disease

Deepak Srivastava & Kathryn N. Ivey

Nature 441, 1097–1099 (2006)

It has been drawn to our attention (by J. Lakota, and by J. J. Minguell and G. P. Lasala) that we used the abbreviation for bone-marrow-derived stem cells (BMSCs) inappropriately in some parts of our Insight Progress article. BMSC is a commonly used acronym for the heterogeneous adult stem cells in bone marrow. The term BMSC was used with this intention, but was placed after describing a study on bone-marrow-derived mesenchymal stem cells, which are a subset of BMSCs. Subsequent references to BMSCs were intended to describe the heterogeneous cells, rather than the specific mesenchymal subtype. Most clinical trials for myocardial infarction used BMSCs and have so far had mixed results. Future trials with isolated mesenchymal stem cells will reveal their potential in the context of heart disease.

ERRATUM

doi:10.1038/nature05377

Eastern Pacific cooling and Atlantic overturning circulation during the last deglaciation

Markus Kienast, Stephanie S. Kienast, Stephen E. Calvert, Timothy I. Eglinton, Gesine Mollenhauer, Roger François & Alan C. Mix

Nature 443, 846–849 (2006)

In Figure 1 of this Letter, the units of organic carbon burial flux on the left *y* axis should be g m^{-2} yr^{-1} and not g m^{-2} kyr^{-2}. In addition, an earlier version of the Supplementary Information for this Letter was inadvertently uploaded. The Supplementary Information was corrected on 30 October 2006.

CORRIGENDUM

doi:10.1038/nature05274

Happy centenary, photon

Anton Zeilinger, Gregor Weihs, Thomas Jennewein & Markus Aspelmeyer

Nature 433, 230–238 (2005)

In the legend to Figure 1, the experiment shown was wrongly attributed to Clauser. The legend should have read 'Principle of Grangier, Roger and Aspect's experiment…(ref. 10)'. In contrast, the Clauser experiment (ref. 4) involved one beam splitter on each side with detectors in each of the resulting four output ports. Four characteristic correlations were measured. In both the Clauser (ref. 4) and the Grangier, Roger and Aspect (ref. 10) experiments the observed correlations cannot be explained via classical light fields, but can easily be understood by assuming single photons that can only be detected once behind a beam splitter.

CORRIGENDUM

doi:10.1038/nature05641

The receptors and coding logic for bitter taste

K. L. Mueller, M. A. Hoon, I. Erlenbach, J. Chandrashekar, C. S. Zuker & N. J. P. Ryba

Nature 434, 225–229 (2005)

C.S.Z., N.J.P.R., K.L.M. and M.A.H. filed a patent application relevant to this work on 10 September 1999 (patent number US6558910), which should therefore have been declared as a competing financial interest.

CORRIGENDUM

doi:10.1038/nature05686

Half-metallic graphene nanoribbons

Young-Woo Son, Marvin L. Cohen & Steven G. Louie

Nature 444, 347–349 (2006)

In Fig. 2b of this Letter, the contour values were incorrectly normalized. The maximum and minimum values of ± 1.4 in the scale bar in Fig. 2b should read ± 36.6. This error does not affect any of our results. We thank E. Rudberg for pointing out this error.

CORRIGENDUM

doi:10.1038/nature05606

The prolyl isomerase Pin1 regulates amyloid precursor protein processing and amyloid-β production

L. Pastorino, A. Sun, P.-J. Lu, X. Z. Zhou, M. Balastik, G. Finn, G. Wulf, J. Lim, S.-H. Li, X. Li, W. Xia, L. K. Nicholson & K. P. Lu

Nature 440, 528–534 (2006)

During editing to meet *Nature*'s limits on length, we removed a reference to an earlier paper[1] reporting that the prolyl isomerase Pin1 promotes production of Alzheimer's amyloid-β (Aβ) from β-cleaved amyloid precursor protein (APP). That paper reported that Pin1 did not bind to full-length APP, but rather to the phosphorylated Thr 668–Pro motif of the carboxy-terminal C99 fragment of APP; Aβ production in Pin1-knockout mice was reduced only from this fragment.

1. Akiyama, H., Shin, R. W., Uchida, C., Kitamoto, T. & Uchida, T. Prolyl isomerase Pin1 facilitates production of Alzheimer's amyloid-β from β-cleaved amyloid precursor protein *Biochem. Biophys. Res. Commun.* 336, 521–529 (2005).

CORRIGENDUM

doi:10.1038/nature05608

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Irina Klimanskaya, Young Chung, Sandy Becker, Shi-Jiang Lu & Robert Lanza

Nature 444, 481–485 (2006); doi:10.1038/nature05142 and *Nature* 444, 512 (2006); doi:10.1038/nature05366

The last sentence of the penultimate paragraph of this Letter should read "Notably, individual morula (8–16 cell)-stage blastomeres have not been shown to have the intrinsic capacity to generate a complete organism in most mammalian species." (see refs 1 and 2).

1. Moore, N. W., Adams, C. E. & Rowson, L. E. A. Developmental potential of single blastomeres of the rabbit egg. *J. Reprod. Fertil.* 17, 527–531 (1968).
2. Willadsen, S. M. The developmental capacity of blastomeres from four and eight-cell sheep embryos. *J. Embryol. Exp. Morph.* 65, 165–172 (1981).