

CORRIGENDUM

doi:10.1038/nature04500

Genetic and developmental basis of evolutionary pelvic reduction in threespine sticklebacks

Michael D. Shapiro, Melissa E. Marks, Catherine L. Peichel, Benjamin K. Blackman, Kirsten S. Nereng, Bjarni Jónsson, Dolph Schluter & David M. Kingsley

Nature 428, 717–723 (2004)

In this Article, we showed that *Pitx1* maps to the major locus controlling pelvic reduction in sticklebacks and shows altered expression, but not altered amino-acid sequence, in a pelvic-reduced population. Owing to a technical error, Figs 3 and 4 of the Article

incorrectly show results from a *Pitx1* sense probe, rather than from an antisense probe. Similar staining is not observed for sense probes from other genes, raising the possibility that sticklebacks may express some endogenous antisense transcripts from the *Pitx1* region.

A new antisense probe (see Fig. 1, below) shows strong expression in the mouth, lower jaw and developing pelvis of marine larvae. *Pitx1* expression appears normal in the mouth and lower jaw of the Paxton benthic population, but is completely missing in the pelvic region. No expression was detected in neuromasts, thymus, olfactory pits or tail in either population, unlike the pattern seen with the original probe. Despite these differences, our major conclusion, that pelvic reduction results from *cis*-acting regulatory changes in the *Pitx1* locus, remains unchanged. This is because the endogenous sense transcript loses its expression along with the presumptive antisense transcript in the pelvic region of the larval progeny of fish missing the pelvis.

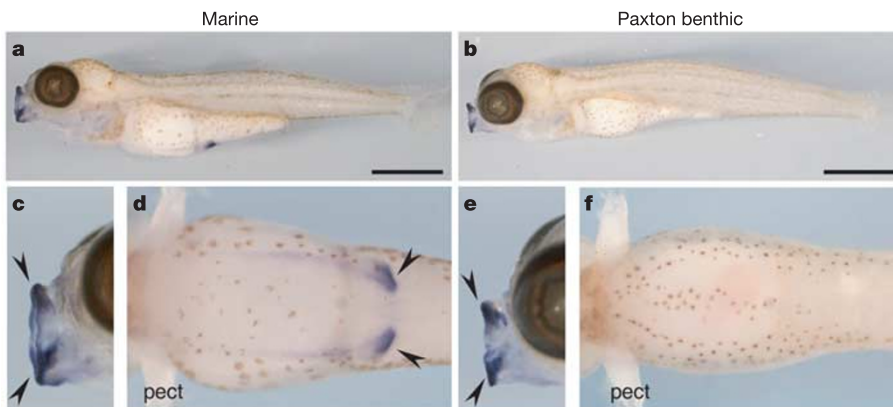


Figure 1 | *Pitx1* is expressed in the prospective pelvic region of marine but not Paxton Lake benthic sticklebacks. **a**, Whole-mount *in situ* hybridization shows *Pitx1* expression in the mouth, jaw and pelvic buds of stage-29 marine larvae. (Details are available from the corresponding author, D.M.K.) **c**, **d**, Enlarged views of the lateral head (**c**) and ventral pelvis (**d**) of stage-29 marine larvae; arrowheads indicate sites of expression. **b**, **e**, **f**, In Paxton benthic larvae, *Pitx1* expression is absent from the prospective pelvic region (**f**), but is present in the mouth and jaw (**e**, arrowheads). Scale bars, 1 mm; pect, pectoral fin.

CORRIGENDUM

doi:10.1038/nature04575

Highly variable Northern Hemisphere temperatures reconstructed from low- and high-resolution proxy dataAnders Moberg[†], Dmitry M. Sonechkin, Karin Holmgren, Nina M. Datsenko, Wibjörn Karlén & Stein-Erik Lauritzen¹

¹Department of Earth Science, University of Bergen, 5007 Bergen, Norway. [†]Present address: Department of Physical Geography and Quaternary Geology, Stockholm University, 10691 Stockholm, Sweden

Nature 433, 613–617 (2005)

The authorship of this Letter is amended to include Stein-Erik Lauritzen. Details of the Søylegrotta Cave record (series 8), which should have been accredited to S.-E.L., were not supplied in the paper but are available from the corresponding author (A.M., anders.moberg@natgeo.su.se) on request.

In addition, the tree-ring-width data from the Indigirka river region (series G) were inadvertently used without the proper permissions: although the series has been discussed in the literature¹, they are unpublished data that have not been made publicly available; they may, however, be obtained through A.M.

1. Sidorova, O. V., Naurzbaev, M. M. Response of *Larix cajanderi* to climatic changes at the Upper Timberline and in the Indigirka River Valley [in Russian]. *Lesovedenie* 2, 73–75 (2002).

CORRIGENDUM

doi:10.1038/nature04573

Genomic perspectives in microbial oceanography

Edward F. DeLong & David M. Karl

Nature 437, 336–342 (2005)

It has been drawn to our attention (by J. A. Fuhrman) that Fig. 2 contains a citation error. Specifically, the citation associated with “Discovery of planktonic marine archaea” in Fig. 2 that was incorrectly given as ref. 20 should instead be ref. 21 (Fuhrman, J. A., McCallum, K. & Davis, A. A. *Nature* 356, 148–149; 1992).