## Retraction

### Site-specific deoxynucleotide substitutions in yeast U6 snRNA block splicing of pre-mRNA *in vitro*

**C.H.Kim, D.E.Ryan, T.Marciniec and J.Abelson**

*The EMBO Journal*, **16**, 2119–2129, 1997

We (the authors) wish to report the following correction regarding our studies of deoxynucleotide-substituted U6 snRNAs in yeast spliceosomes. In our original work, we tested 50 site-specific deoxynucleotide substitutions in U6 RNA for their effects on splicing. Of these, only four specific deoxynucleotides blocked splicing and did so reproducibly. Recently, we repeated these experiments using the original stocks of the deoxy-substituted pieces, and we observed that splicing was not blocked or diminished relative to controls. Multiple attempts to reproduce our published results have failed. However, some of the original conditions cannot be replicated. The U6 RNA is synthesized *in vitro* in these experiments via ligation of four or five synthetic oligonucleotide pieces. Although we still have stocks of the original yeast extract and deoxy-substituted oligonucleotides, the original stocks of the flanking pieces of U6 RNA had been depleted. Hence, we are unable to duplicate the reported experiments exactly. Although we have tested various parameters, including various extracts, preparations of the U6 RNA pieces, and U6 reconstitution conditions, we are unable to find conditions under which the four deoxy substituents in question have any deleterious effect on splicing. In any case, the recent observations of normal splicing for these four substituents mean that they do not block splicing generally. Though we are not now able to reproduce the reported observations for the four deoxy substitutions, they may well have a deleterious effect on splicing under conditions not yet understood. We are left with the revised conclusion that synthetic U6 RNAs substituted with a single deoxynucleotide at any of the 50 positions tested (39–88 in yeast U6) are able to reconstitute splicing activity under standard conditions *in vitro*.

## Retraction

### Auxin inducibility and developmental expression of axi 1: a gene directing auxin independent growth in tobacco protoplasts

**R.Walden, H.Hayashi, H.Lubenow, I.Czaja and J.Schell**

*The EMBO Journal*, **13**, 4729–4736, 1994

### A plant cation–chloride co-transporter promoting auxin-independent tobacco protoplast division

**H.Harling, I.Czaja, J.Schell and R.Walden**

*The EMBO Journal*, **16**, 5855–5866, 1997

In a recent article in the journal *Science* volume 283, pages 1987–1989 (1999) it is said that I (Schell) had no plans to publish retractions of the papers in the journals in which they had originally appeared. In fact, I wanted to stress the point that the first responsibility the collaborating colleagues in and outside the Institute and I had felt was to publish our results showing that the previously published data could not be reproduced by another, more objective method. Therefore, the members of the investigating team decided to publish all further data re-evaluating this fraud as a regular scientific paper in *The Plant Journal*. After peer review and acceptance of the paper, it was agreed with the Editor-in-Chief of *The Plant Journal*, Professor Diana Bowles, that after publication short correction statements should be sent to individual journals, which could refer to this paper for full details of new experiments confirming the irreproducibility of the protoplast assays in question (Schell *et al*., 1999). Since the paper has now appeared, we hereby retract officially the results regarding auxin independent division of tobacco protoplast-derived cells in our papers mentioned above.

## Reference

Schell,J., Bisseling,T., Dulz,M., Franssen,H., Fritze,K., John,M., Kleinow,T., Leßnick,A., Miklashevichs,E., Pawlowski,K., Rohrig,H., van de Sande,K., Schmidt,J., Steinbiß,H.-H. and Stoll,M. (1999) Re-evaluation of phytohormone-independent division of tobacco protoplast-derived cells. *Plant J*., **17**, 461–466.