

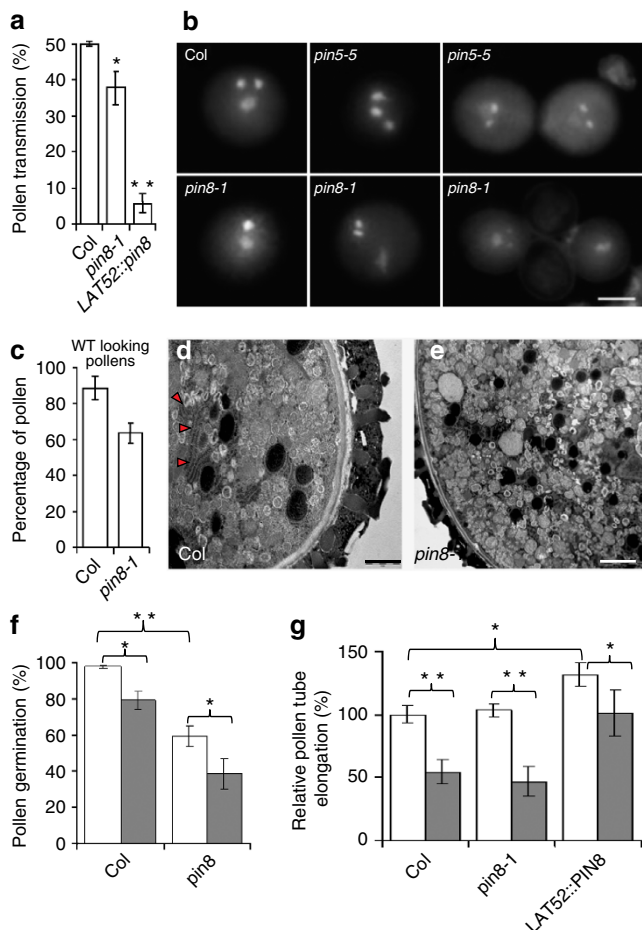
# Corrigendum: ER-localized auxin transporter PIN8 regulates auxin homeostasis and male gametophyte development in *Arabidopsis*

Zhaojun Ding, Bangjun Wang, Ignacio Moreno, Nikoleta Dupláková, Sibū Simon, Nicola Carraro, Jesica Reemmer, Aleš Pěňčík, Xu Chen, Ricardo Tejos, Petr Skůpa, Stephan Pollmann, Jozef Mravec, Jan Petrášek, Eva Zažímalová, David Honys, Jakub Rolčík, Angus Murphy, Ariel Orellana, Markus Geisler & Jiří Friml

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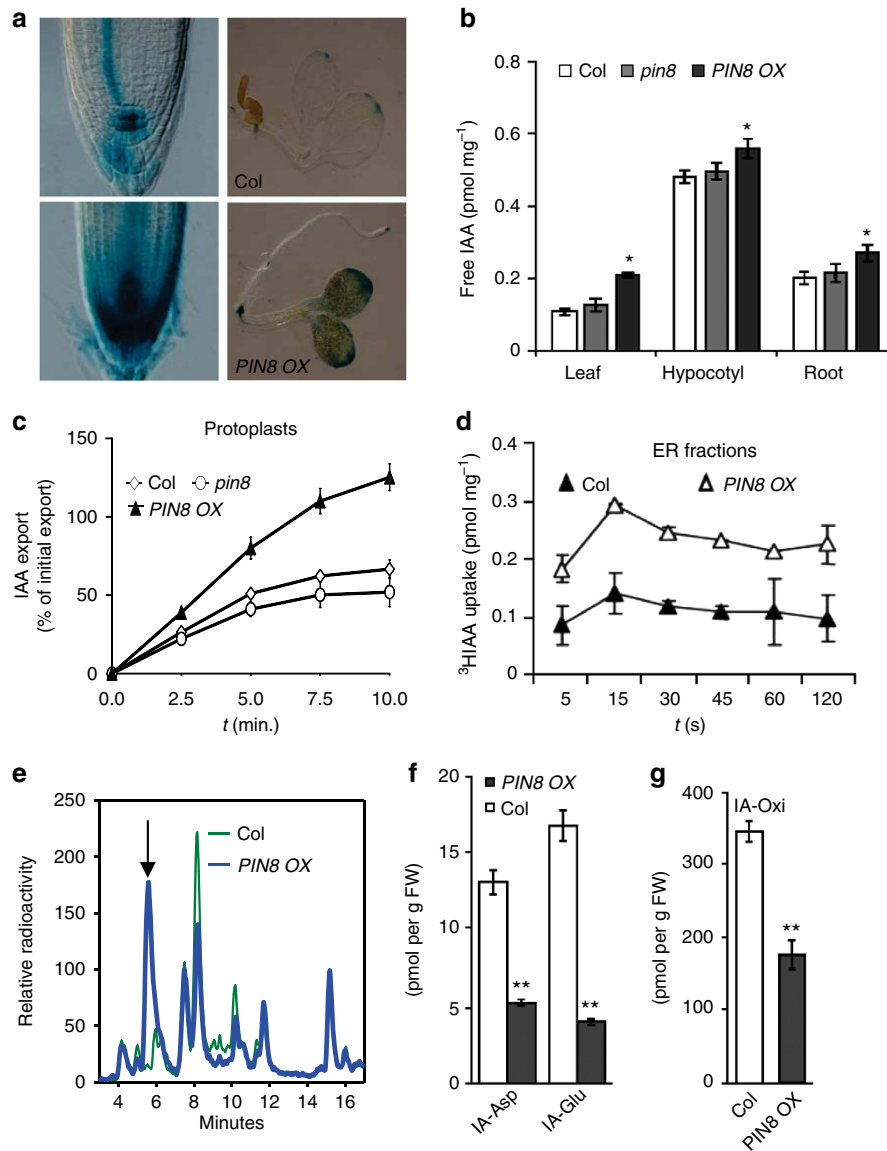
This Article contains errors in Figs 1, 4, and Supplementary Fig. S6, for which we apologize.

In Fig. 1b, the Col picture was inadvertently duplicated from the image below it. In addition, the legend should have defined the scale bar for panel e as 1  $\mu\text{m}$ . The correct version of Fig. 1 and its legend appears below.



**Figure 1 | PIN8 is involved predominantly in the male gametophyte development.** (a) The *pin8* mutant and the *LAT52::PIN8* line showed reduced pollen transmission ability. Error bars represent the standard error of more than ten independent crosses (Student's *t*-test, \* $P < 0.05$ ). (b,c) DAPI staining analysis showing defects in the morphology of *pin8* and *pin5* mutant pollen. Both mutants showed distorted and/or misplaced male germ unit and less frequently also exhibit pollen mitosis defects. Sometimes, collapsed pollen grains were observed. Scale bar, 10  $\mu\text{m}$ . Error bars represent the standard error of more than 23 independent plants (Student's *t*-test, \*\* $P < 0.01$ ). (d,e) Typical ER clusters in wild-type (WT) pollen (d) were not observed in 10–15% *pin8* pollen (observed 150 pollen grains) (e) by transmission electron microscope analysis. Scale bar, 1  $\mu\text{m}$ . Red arrows mark ER clusters. (f) *pin8* (2256 pollen were analysed) shows reduced *in vitro* pollen germination abilities (2,814 Col pollens were analysed as the control) and increased sensitivity to auxin treatment (100 nM NAA) with a 35% reduction of pollen germination in *pin8* (5,017 pollens were analysed) compared with the 19% reduction in Col (1,131 pollens were analysed). Error bars represent the standard error of more than ten independent plants (Student's *t*-test, \* $P < 0.05$ ; \*\* $P < 0.01$ ). White and grey columns represent without and with NAA treatment, respectively. (g) Overexpression of *PIN8* in pollen in the *LAT52::PIN8* line strongly increased the resistance (with a 24% inhibition of pollen tube length compared with the 46% inhibition in Col) of *in vitro* pollen germination to NPA (100  $\mu\text{M}$  NPA) treatment. Error bars represent the standard error of more than six independent plants (Student's *t*-test, \* $P < 0.05$ ; \*\* $P < 0.01$ ). White and grey column represent without and with NPA treatment, respectively, in Col, *pin8* or *LAT52::PIN8*.

In Fig. 4d, the filled triangles should have been labelled as Col and the open triangles as *PIN8OX*. The correct version of Fig. 4 appears below.



In the legend to Supplementary Fig. S6, the scale bar should be defined as 20  $\mu$ m.