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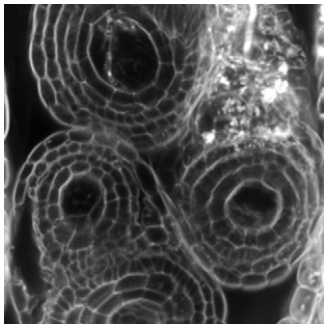
ON THE COVER



Embryogenesis begins after ovule fertilization when the zygote undergoes cell division to establish the apical and basal embryo and then continues with specialized cell divisions until a mature embryo is formed. Inhibitor and genetic studies have shown that auxin gradients contribute to both ovule and embryo development. The *Arabidopsis thaliana* protein APM1 is an M1 metaloprotease that has affinity for and catalyzes the hydrolysis of the auxin transport inhibitor naphthylphthalmic acid. Peer et al. (pages 1693–1721) show that, in addition to embryonic patterning defects, *apm1* loss-of-function alleles exhibit distinct seedling lethal phenotypes caused by premature determinacy of the primary root meristem. The cover image shows four ovules in a silique from an *apm1-1* heterozygous plant as well as a pollen tube in the top right corner. The two synergid cells, an egg cell, and two polar nuclei are visible in the center left ovule.

IN BRIEF

PERSPECTIVES

REVIEW

RESEARCH ARTICLES

C Some figures in this article are displayed in color online but in black and white in the print edition.

W Online version contains Web-only data.

OA Open Access articles can be viewed online without a subscription.

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