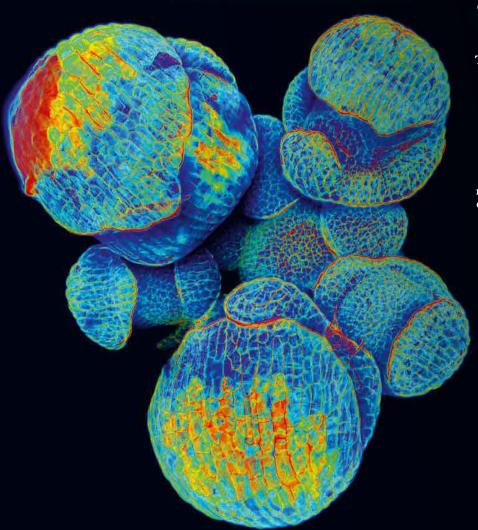


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## DOUBLE TAKE

MAX PLANCK INSTITUTE OF MOLECULAR PLANT PHYSIOLOGY



Only when the timing is right and a plant flowers at the correct time can it properly form seeds and ensure its continued existence. Thale cress (Arabidopsis thaliana) often grows in fields and along roadsides. It opens its inconspicuous white flowers in the spring (left-hand picture). In order to find the ideal time to bloom, the plant measures the length of the day using special sensors in the leaves. If the light period is long enough, messenger substances migrate from the leaves to the tips of the shoots, where they transmit the signal to flower. As soon as the molecular message has arrived, flowers begin to develop from the dome-shaped tissue of the shoot tips — the shoot apical meristem — in which the plant stem cells are located (right).