

# Blooming Numbers

How a quantitative approach helps us to understand plants

Our mission at the Sainsbury Laboratory is to advance our understanding of how plants develop, change, and respond to the environment.

To do this we:

## 1. Research across scales:

We investigate the fundamental processes that regulate plant development across multiple scales, from molecular biology to cells, mechanics, individual plants, populations and ecosystems.

## 2. Take an interdisciplinary approach:

We bring together specialists and techniques from diverse fields with mechanics, molecular biology, genetics, genomics, imaging, computational modelling, evolution, and mathematics.

## 3. Use new technologies:

We work with a broad range of species, use and develop cutting-edge tools, including high-resolution microscopy, advanced modelling, and specialised genetic reporters.

Images from top: Floral meristem model by Henrik Åhl, *Alopecurus myosuroides* (black grass) by Erin Patterson, SEM image, photo and confocal microscopy image of shoot meristem of *Arabidopsis thaliana* by Weibing Yang, Hibiscus composite by Lucie Riglet and Edwige Moyroud, *Medicago truncatula* flower by Katharina Schiessl, and *Brachypodium distachyon* flower by Madelaine Bartlett.

