

PLANT BIOPHYSICS: MECHANISMS, MODELS and MIMETICS

Harvard Plant Biology Initiative
9th Annual Symposium
May 8, 2014 at Weld Hill



8:30am **REGISTRATION**

9:00am Introductory Comments

9:00-9:45am Daniel Cosgrove, Pennsylvania State University
Rethinking the architecture of growing plant cell walls and the mechanism of cell wall loosening

9:45-10:30am L. Mahadevan, Harvard University
Geometry and physics of plant morphogenesis and movement: cells, stems, leaves and flowers

10:30-10:50pm **TEA**

10:50-11:35pm Richard Smith, Max Planck Institute for Plant Breeding Research
3D models of growth and cell division in the Arabidopsis embryo

11:35-12:20pm Olivier Hamant, École Normale Supérieure de Lyon
How to fold a plant tissue?

12:20-1:40pm **LUNCH**

1:40-2:25pm Mimi Koehl, University of California, Berkeley
How kelp produce blade shapes suited to different flow regimes

2:25-3:10pm Lorna Gibson, Massachusetts Institute of Technology
Hierarchical structure and mechanics of plant materials

3:10-3:30pm **TEA**

3:30-4:15pm Peter Fratzl, Max Planck Institute for Colloids and Interfaces
Mechanisms for passive actuation in plant materials

4:15-5:15pm Elliot Meyerowitz, California Institute of Technology
How mechanical and chemical signals interact to create plant form

5:15-6:15pm **RECEPTION**

