

INSTITUTO JUAN MARCH DE ESTUDIOS E INVESTIGACIONES

Centre for International Meetings on Biology

Workshop on

PLANT MORPHOGENESIS

Programme

SUNDAY, October 19th, 1997

20.00 Opening reception

MONDAY, October 20th, 1997

9.00 Registration

Session 1: Molecular mechanisms that regulate pattern formation Chair: José Luis Micol

9.30 **David W. Meinke:** Genes with essential functions during embryogenesis in *Arabidopsis*.

10.10 **Gerd Jürgens:** Pattern formation and cytokinesis in the *Arabidopsis* embryo.

10.50 Coffee break

11.20 **Thomas Berleth:** Genetic analysis of root initiation and plant cell axialization in *Arabidopsis thaliana*.

Short presentations:

12.00 **Pere Puigdomènech:** Characterization of genes involved in early embryogenesis in maize.

12.15 **Carmen Fenoll:** Development and pattern of stomata in *Arabidopsis*.

12.30 Discussion

13.00 Lunch

Session 2: Specification of cell fate
Chair: Sarah Hake

- 14.30 **Liam Dolan:** Organogenesis in the *Arabidopsis* root: the epidermis.
- 15.10 **John Schiefelbein:** Cell fate specification in the root epidermis of *Arabidopsis*.
- 15.50 Coffee break
- 16.20 **Hiroo Fukuda:** Direct transdifferentiation of mesophyll cells into xylem cells in culture.
- 17.00 **M. David Marks:** The role of *GLI* and other genes in *Arabidopsis* trichome development.
- 19.00 Open session:
 Marc Van Montagu: Can we and should we modulate Plant Growth and Development?

TUESDAY, October 21st, 1997

Session 3: Morphogenetics pathways and phase change
Chair: Ton Bisseling

- 9.00 **Jan Traas:** Shoot apical meristem function in *Arabidopsis*: the cellular basis.
- 9.40 **Sarah Hake:** Meristem functions: the fine line between determinate and indeterminate fates.
- 10.20 **Jane Langdale:** Pattern formation and cellular differentiation in maize leaves.
- 11.00 Coffee break
- 11.30 **José Luis Micol:** A genetic approach to the dissection of leaf ontogeny in *Arabidopsis*.
- 12.10 **Scott Poethig:** Turning over a new leaf: the regulation of leaf identity in maize and *Arabidopsis*.
- 12.50 Short presentation:
 Mieke Van Lijsebettens: Genetic control of leaf lamina growth in *Arabidopsis*.

- 13:05 Lunch
- 14.15 Piano concert
- 15.00 **Marc Van Montagu:** *Arabidopsis*-pathogen interactions: from signalling to morphogenesis.
- 15.40 **Kevin Pyke:** A genetic analysis of plastid development in higher plants.
- 16.20 Coffee break
- 16.50 **Dirk Inzé:** Cell cycle control in *Arabidopsis*.
- 17.30 **Robert Williams:** Genetic control of apical and floral meristem structure in *Arabidopsis*.

WENDESDAY, October 22nd, 1997

Session 4: Cell to cell communication and differentiation
Chair: Scott Poethig

- 9.00 **Tsvi Sachs:** Cell polarization: a key process for patterned differentiation and plant organization.
- 9.40 **Ton Bisseling:** The role of lipochitooligosaccharides in legume nodulation.
- Short presentation:
- 10.20 **J.A.H. Murray:** Retinoblastoma proteins and cell differentiation in maize.
- 10.35 Coffee break
- 11.05 **Thomas Altmann:** Brassinosteroids, essential regulators of plant growth and development.
- 11.45 **Chris van der Schoot:** Symplasmic networking at the shoot apical meristem.
- Short talk:
- 12.25 **Renze Heidstra:** Cell signalling in *Arabidopsis* root development.
- 12.40 Concluding remarks. Chair: **Marc Van Montagu.**
- 13.00 Lunch

END OF WORKSHOP