

# *Mechanisms of Development in Plants and Animals*

## **A seminar series (UE Europe)**

Organisers: Pradeep Das (RDP) and Vincent Laudet (IGFL)  
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The course comprises **four 1-hour sessions daily**, including two **introductory classes** (held in the 'Amphi K' or 'Amphi I') and two **seminars** (in the *Salle des thèses*)

### **June 2nd (Monday)**

- 09.30 Introductory class on the biophysics of growth in walled systems (**Braybrook**)
- 10.30 Introductory class on regeneration in vertebrates (**Begemann**)
- 13.30 **Siobhan Braybrook** (Cambridge, UK)  
"Multiscale shape growth in plants"
- 14.30 **Gerrit Begemann** (U. Bayreuth, Germany)  
"Retinoic acid controls various aspects of zebrafish fin regeneration"

### **June 3rd (Tuesday)**

- 09.30 Introductory class on spatial modeling intercellular molecular interactions and mechanics (**Jönsson**)
- 10.30 Introductory class on somitogenesis and on amphioxus as a model system for evo-devo studies (**Bertrand**)
- 13.30 **Henrik Jönsson** (Cambridge, UK)  
"Understanding plant shoot development - a computational morphodynamics approach"
- 14.30 **Stéphanie Bertrand** (Laboratoire Arago, Banyuls, France)  
"Evolution of somitogenesis in the chordate lineage"

### **June 4th (Wednesday)**

- 09.30 Introductory class on plant domestication and development (**Parcy**)
- 11.30 Introductory class on hydra and metazoan body axes (**Holstein**)
- 13.30 **Francois Parcy** (CEA, Grenoble, France)  
"An integrated structural approach to flower development"
- 14.30 **Thomas Holstein** (U. Heidelberg, Germany)  
"The Hydra organizer and the evolution of metazoan body axes"

### **June 5th (Thursday)**

- 09.30 Introductory class on the genetics of the shoot meristem (**Lohmann**)
- 10.30 Introductory class on morphogenetic gradients in the Drosophila embryo (**Dostatni**)
- 13.30 **Jan Lohmann** (U. Heidelberg, Germany)  
"A regulatory framework of plant stem cell control"
- 14.30 **Nathalie Dostatni** (Institut Curie, Paris, France)  
"Transcriptional dynamics in the Drosophila embryo"

### **June 6th (Friday)**

- 09.30 Introductory class on plant embryo development - morphogenesis in miniature (**Weijers**)
- 10.30 Introductory class on Garris and evo-devo (**Khila**)
- 13.30 **Dolf Weijers** (Wageningen U., Netherlands)  
"Genetic control of growth and patterning in the plant embryo"
- 14.30 **Abderrhaman Khila** (IGFL, ENS Lyon)  
"An integrative approach to the study of animal diversity"

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## June 9th (Monday)

*National holiday*

## June 10th (Tuesday)

09.30 Introductory class on the mechanisms of organ specification in flowers ([Wellmer](#))

10.30 Introductory class: "From Gene to Force" ([Bellaïche](#))

13.30 **Frank Wellmer** (Trinity College Dublin, Ireland)

"Repression of the leaf development program by floral organ identity factors"

14.30 **Yohanns Bellaïche** (Institut Curie, Paris, France)

"Epithelial tissue dynamics"

## June 11th (Wednesday)

09.30 Introductory class on the evolution on studying character evolution in plants ([Harrison](#))

10.30 Introductory class on left-right asymmetry ([Noselli](#))

13.30 **Jill Harrison** (Cambridge, UK)

"Branching in plant evolution"

14.30 **Stéphane Noselli** (Institut Valrose, Nice, France)

"Left-Right asymmetry in *Drosophila*"

## June 12th (Thursday)

09.30 Introductory class on the genetic control and evolution of leaf shape ([Laufs](#))

10.30 Introductory class on mechanics and morphogenesis ([Lenne](#))

13.30 **Patrick Laufs** (INRA, Versailles, France)

"Leaf morphogenesis in *Arabidopsis*, from genes to shape"

14.30 **Pierre-François Lenne** (IBDM, Marseille, France)

"Mechanics of cell contacts during tissue morphogenesis"