

**Preliminary Program (rev June 2008)**

***Frontiers in Developmental Biology: Concepts, Techniques and Model Organisms***

**Satellite Short Course of the Fourth International Meeting of the  
Latin American Society for Developmental Biology**

October 23 – November 1, 2008. Fundación Instituto Leloir, Buenos Aires, Argentina  
Organizers: Eric Wieschaus, Pablo Wappner and Ida Chow

**Thursday – 10/23/08**

14:00 – 17:00 Arrival, Registration and Poster set up  
17:30 – 18:00 Introductory Remarks by Organizers and Dignitaries  
18:00 – 19:00 Eric Wieschaus, Princeton University, NJ  
*The biology of cell shape change in the early Drosophila embryo*  
19:00 – 21:00 Opening Reception and Poster Session

**Friday – 10/24/08**

9:00 – 10:00 Ruth Lehmann, Skirball Inst./HHMI, NY  
*Genetic approaches to live imaging in Drosophila*  
10:00 – 13:00 Concurrent Practical Sessions  
13:00 – 15:00 Lunch at Leloir Institute  
15:00 – 16:00 Rolando Rivera-Pomar, Univ. Nacional de la Plata, Argentina  
*Triatoma development*  
16:00 – 17:00 Pablo Wappner, Inst. Leloir, Argentina  
*Modulation of Drosophila development by external stimuli*  
17:00 – 17:30 Break  
17:30 – 21:00 Poster Session  
21:00 Dinner in town

**Saturday – 10/25/08**

9:00 – 10:00 Siobhan Brady, Duke Univ., NC  
*TBA*  
10:00 – 13:00 Concurrent Practical Sessions  
13:00 – 15:00 Lunch at Leloir Institute  
15:00 – 16:00 Javier Palatnik, Univ. Nac. del Rosario, Argentina  
*Control of plant development by microRNAs*  
16:00 – 17:00 *TBA*  
17:00 – 17:30 Break  
17:30 – 21:00 Poster Session  
21:00 Dinner in town

**Sunday – 10/26/08**

9:00 – 15:00 Extra-curricular Activities  
15:00 – 17:00 Round Table I:  
*Evolution of developmental mechanism; genes and signaling pathways.*

17:00 – 17:30 Break  
17:30 – 20:30 Concurrent Practical Sessions  
21:00 Dinner in town

**Monday – 10/27/08**

9:00 – 10:00 Nibia Berois-Domenech, Univ. de la Republica, Uruguay  
*TBA*

10:00 – 13:00 Concurrent Practical Sessions

13:00 – 15:00 Lunch at Leloir Institute

15:00 – 16:00 Miguel Allende, Univ. de Chile, Chile  
*mRNA expression pattern during development in zebrafish*

16:00 – 17:00 Nora Calcaterra, Univ. Nac. de Rosario, Argentina  
*Craniofacial development of zebrafish*

17:00 – 17:30 Break  
17:30 – 20:30 Concurrent Practical Sessions  
21:00 Dinner in town

**Tuesday – 10/28/08**

9:00 – 10:00 Scott Fraser, Caltech, CA  
*Imaging whole embryos*

10:00 – 13:00 Concurrent Practical Sessions

13:00 – 15:00 Lunch at Leloir Institute

15:00 – 17:00 Round table II:  
*Advantages and limitations of different model organisms in developmental biology research.*

17:00 – 17:30 Break  
17:30 – 20:30 Concurrent Practical Sessions  
21:00 Dinner in town

**Wednesday – 10/29/08**

9:00 – 10:00 Alejandro Sanchez-Alvarado, Univ. of Utah, UT  
*Planarian regeneration, a model for developmental processes*

10:00 – 13:00 Concurrent Practical Sessions

13:00 – 15:00 Lunch at Leloir Institute

15:00 – 16:00 Roberto Mayor, Univ. College London, United Kingdom  
*Role of Wnt signalling in neural crest development: from induction to migration*

16:00 – 17:00 Manuel Aybar, Univ. Nac. de Tucumán, Argentina  
*Intracellular factors regulating Xenopus neural crest development*

17:00 – 17:30 Break  
17:30 – 20:30 Concurrent Practical Sessions  
21:00 Dinner in town

**Thursday – 10/30/08**

9:00 – 10:00 Billie Swalla, Univ. of Washington, WA  
*Hopeful hemichordates, twisted tunicates, and lucky lancelets: What do they tell us about the evolution of chordates?*

10:00 – 13:00	Concurrent Practical Sessions
13:00 – 15:00	Lunch at Leloir Institute
15:00 – 16:00	Pablo Visconti, Univ. of Virginia, VA <i>Fertilization</i>
16:00 – 17:00	Luis Mayorga, Univ. Nacional de Cuyo, Argentina <i>Membrane fusion during the acrosomal exocytosis in human sperm.</i>
17:00 – 17:30	Break
17:30 – 20:30	Concurrent Practical Sessions
21:00	Dinner in town

### **Friday – 10/31/08**

9:00 – 10:00	Marianne Bronner-Fraser, Caltech, CA <i>Development and evolution of the vertebrate neural crest</i>
10:00 – 13:00	Concurrent Practical Sessions
13:00 – 15:00	Lunch at Leloir Institute
15:00 – 16:00	Cathy Krull, Univ. of Michigan-Ann Arbor, MI <i>Axon guidance in the periphery</i>
16:00 – 17:00	Richard Behringer, UT MD Anderson Cancer Ctr, TX <i>TBA</i>
17:00 – 17:30	Break
17:30 – 19:30	Round Table III: <i>Communicating results and writing manuscripts for publication.</i>
20:00	Closing Banquet

### **Saturday – 11/01/08**

9:00 – 10:00	Luis Quesada-Allué, Inst. Leloir, Argentina <i>Insect metamorphosis</i>
10:00 – 12:00	Round Table IV: <i>Teaching developmental biology.</i>
12:00 – 13:00	Concluding Remarks
13:00 – 15:00	Lunch at Leloir Institute and Check out
15:00	Registration at LASDB 4th International Meeting

### **Practical Modules**

The concurrent practical modules will focus on the major techniques most commonly used in developmental biology studies for both standard and emerging/unconventional model organisms. These will include hands-on training of various techniques used for:

- gene expression studies: mRNA *in situ* hybridization, antibody staining, enhancer trapping;
- different strategies for specific gene silencing: mutagenesis, RNAi, morpholinos;
- methods for generating transgenic organisms and performing ectopic gene expression: transposons, electroporation, microinjection of mRNA, Gal4/UAS system.

In addition, cell lineage studies, regeneration assays and transplantation experiments will be carried out in the practical modules of the course. The major goal is to give the students an opportunity to acquire first-hand experience on how developmental biology research is currently carried out in leading laboratories using different experimental organisms and approaches.