Frontiers in Developmental Biology: Concepts, Techniques and Model Organisms

A Satellite Short Course of the Fourth International Meeting of the Latin American Society of Developmental Biology (LASDB)

Instituto Leloir, Buenos Aires, Argentina October 23 – November 1, 2008

History

In 2003, the Latin American Society of Developmental Biology (LASDB), led by Roberto Mayor, then at the University of Chile, organized its First International Meeting in Valle Nevado, Chile. Just before the meeting, the Society offered a short laboratory course where some of the invited speakers taught a number of students from Latin American institutions. Both meeting and practical course were remarkably successful and provided additional learning opportunity for the students who also attended the meeting.

In 2005, the second satellite short course of the Second International Meeting of LASDB, *Model Organisms and Innovative Approaches in Developmental Biology* was organized jointly by the Society for Developmental Biology (SDB) and LASDB and held in Juquehy, Brazil. Ruth Lehmann, SDB President at the time, local member José Xavier Neto of the University of São Paulo and Ida Chow of SDB were the organizers of this course which received major funding from the National Science Foundation's (NSF, USA) Pan American Advanced Studies Institute (PASI) program. Additional support came from the National Institute of Child and Human Health (NICHD/NIH, USA), Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP, Brazil), Conselho Nacional de Pesquisa (CNPq, Brazil), International Society of Developmental Biologists (ISDB) and SDB. Fifteen students from Latin American institutions and fifteen US-based students were selected for this course. The final program with links to the lectures is available at:

http://www.sdbonline.org/ShortCourse/05_ShortCourse%20Program_FINAL.pdf.

This year, again, SDB and LASDB will jointly organize the third short course, to take place just before the 4th International Meeting of LASDB, to be held in Buenos Aires, Argentina. The organizers of this short course, *Frontiers in Developmental Biology: Concepts, Techniques and Model Organisms* are: Eric Wieschaus, SDB President 2007-2008, Pablo Wappner, Instituto Leloir and Ida Chow, SDB Executive Officer. Major funding is provided by a <u>PASI</u> grant from <u>NSF</u>.

Aims of the 2008 Short Course

The main objectives of this short course are:

- To expose graduate students and postdoctoral fellows, both Americans and Latin Americans, to the fundamental questions in the field of developmental biology and tools to investigate them.
- To forge a cadre of young investigators interested and trained in the field to continue future advances as well as to disseminate the knowledge to specialists and non-specialists at all levels.
- To promote unique opportunities for integration between students and investigators from the United States and Latin American countries

These goals will be achieved with the participation of top investigators and students from the Americas. The course will provide a singular opportunity for American students to learn first-hand how research is conducted in Latin America and to appreciate the chances available for scientific investigation using the biodiversity in the region. The course will examine in detail the basis underlying the recent fast advancements in the field of developmental biology: Its reliance on a variety of model organisms and its ability to incorporate and generate new technologies. Top investigators (established and new experts in respective areas) will discuss the strength, weaknesses and state-of-the-art applications of model organisms, both the mainstream, e.g. *Drosophila*, zebrafish, *Xenopus*, chick, mouse; and emerging, such as planarian, tunicates, *Amphioxus*. In order to give the students a sense of broader possibilities in the field, the subject of evolution and development will be addressed. All together, the course content is tailored to give the students a balanced view of the potentials and limitations of model organisms and current technologies, as well as future approaches in developmental biology. Discussion sessions on publishing and teaching will be included in this course.

The basic expenses (course materials, travel, lodging and most meals) for the students will be covered by the Course, which is funded primarily by a PASI grant (#OISE-0719671).