#### FINAL PROGRAM OF THE WORKSHOP

## **Chromatin Domains and Insulators**

Venue of the workshop:

Universidad Internacional de Andalucía Sede "Antonio Machado" Palacio de Jabalquinto Plaza de Santa Cruz, s/n 23440 Baeza





Sunday, November 8th, 2009

20:00 Get together dinner, meet the participants and invited speakers

Monday, November 9<sup>th</sup>, 2009

09:00-09:10 Opening of the workshop: Organizers

Victor Corces, Felix Recillas-Targa, Lluis Montoliu

Session I: Insulator paradigms
Chair: Folix Pocillas Targa

Chair: Felix Recillas-Targa

09:10-10:00 Chromatin boundaries, genome organization, and epigenetic

regulation
Gary Felsenfeld

10:00-10:30 Coffee break

Session II: Chromatin domains and epigenetic mechanisms

Chair: Victor Corces

10:30-11:00 Drosophila Insulators: Bridging the Gap between Transcription

and Nuclear Organization

Victor G. Corces

11:00-11:30 Chromatin organization and epigenetic regulation

Ann Dean

11:30-12:00 PcG protein-mediated insulator bypass

Giacomo Cavalli

- 12:00-12:30 Chromatin Insulators in Drosophila melanogaster Pavel Georgiev
- 12:30-12:45 Short talk: Boundary elements in the Drosophila BX-C and proteins involved in their functionality
  M. Lluisa Espinàs
- 13:30-15:30 Lunch break

<u>Session III: Other boundaries found in vertebrate genomes</u> Chair: Gary Felsenfeld

- 15:30-16:00 *Chromatin marks exons* Roderic Guigó
- 16:00-16:30 A new type of boundary, associated with SINE B2 elements Victoria Lunyak
- 16:30-17:00 The function of the novel CTCF-dependent  $\alpha$ EHS-1.4 insulator is modulated throughout erythroid differentiation and contributes to the chicken  $\alpha$ -globin gene domain regulation Felix Recillas-Targa
- 17:00-17:15 Short talk: *B1-X35S*, a novel SINE B1 retrotransposon that binds Dioxin receptor, Slug and Snail has insulator activity Pedro M. Fernández-Salguero
- 17:15-17:45 Coffee break

Session IV: Barrier and boundary function in yeast genomes Chair: Rolf Ohlsson

- 17:45-18:15 *tRNA promoter mediated insulation in eukaryotes*Rohinton T Kamakaka
- 18:15-18:45 Three-dimensional folding of chromosomal domains in relation to gene expression

  Marc Marti-Renom
- 18:45-19:00 Short talk: *Analysis of the heredity change of the boundary*Masaya Oki
- 19:00-20:00 Viewing posters
- 20:30 Dinner

### Tuesday, November 10<sup>th</sup>, 2009

# Session V: Boundaries and nuclear processes

Chair: Giacomo Cavalli

- 09:00-09:30 Non-allelic transvection of multiple imprinted loci is organized by the H19 imprinting control region during germline development

  Rolf Ohlsson
- 09:30-10:00 Potential role of CTCF and cohesin in V(D)J recombination of immunoglobulin genes

  Ann J. Feeney
- 10:00-10:30 CTCF and cancer: a complex relationship Elena Klenova
- 10:30-10:45 Short talk: Chicken beta-globin insulator as a tool to improve transgene expression in somatic cells used for nuclear transfer Silvia Nicolás
- 10:45-11:30 Coffee break
- 11:30-13:30 Social-cultural activity (Guided tour of Baeza)
- 13:30-15:30 Lunch break

### Session VI: Boundaries and gene transfer approaches

Chair: Lluís Montoliu

- 15:30-16:00 Use of Chromatin Insulators To Improve the Expression and Safety of Retroviral Vectors

  David Emery
- 16:00-16:30 *Visualization of gene limits*José Luis Gómez-Skarmeta
- 16:30-16:45 Short talk: A 145kb multigene fragment of pig genome enhances production of recombinant proteins

  Geneviève Jolivet
- 16:45-17:00 Short talk: *The Enhancer Disruption (ED) screen in zebrafish*José Bessa
- 17:00-17:15 Short talk: Transcription-dependent Organization of Gene
  Networks in mammalian cell nucleus revealed by High Resolution
  Chromatin Interaction analysis and massive parallel sequencing
  (ChIA-Seq)
  Sreenivasulu Kurukuti

17:15-17:45 Coffee break

17:45-19:30 Viewing posters

20:30 Dinner

## Wednesday, November 11th, 2009

<u>Session VII: Bioinformatic approaches to understand boundaries in genomes</u> Chair: José Luis Gomez-Skarmeta

- 09:00-09:30 Epigenomic landscapes of pluripotent and lineage-committed human cells
  Bing Ren
- 09:30-10:00 Identification and functional validation, in vitro and in vivo, of vertebrate genome insulators
  Lluís Montoliu
- 10:00-10:15 Short talk: Genome-wide analyses confirm the association of ASH2 and H3K4me3 in Drosophila wing imaginal discs
  Sílvia Pérez-Lluch
- 10:30-10:45 Concluding remarks: Organizers
  Victor Corces, Felix Recillas-Targa, Lluís Montoliu
- 10:45-11:15 Coffee break
- 11:30 Bus departs (lunch bag included)
- 13:00 Lunch for the rest of participants