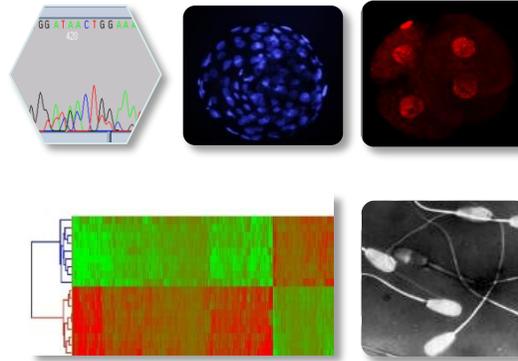


**Speakers:**

- **Ann Van Soom**, Dept of Reproduction, Obstetrics and Herd Health, Univ of Ghent, Belgium
- **Rafael Oliva**, Human Genetics Laboratory, Hospital Clínic. Faculty of Medicine, Univ of Barcelona, Spain
- **Alfonso Gutiérrez-Adán**, Dept of Animal Reproduction INIA-Madrid, Spain
- **Sebastián Cánovas**, Andalusian Cellular Reprogramming Lab, LARCEL, Malaga, Spain
- **Gavin Kelsey**, Epigenetics Programme, The Babraham Institute, Cambridge, UK.
- **Elena Ivanova**, Epigenetics Programme, The Babraham Institute, Cambridge, UK.
- **José-Luis García-Perez**, Centro de Genómica e Investigación Oncológica, GENYO, Granada, Spain

**Organizers:**



**Epigenetics in Reproductive  
Biology,  
18-21 May, 2015, Murcia, Spain**

**Contact**

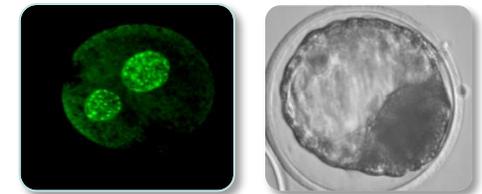
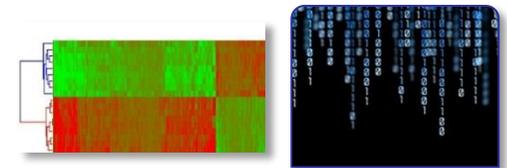
María Jiménez-Movilla: [mariajm@um.es](mailto:mariajm@um.es)  
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**Training School on  
Epigenetics in  
Reproductive Biology**

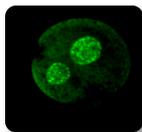
**18-21th May, 2015**

**University of Murcia, Spain**



**Pre-registration:**

## Programme

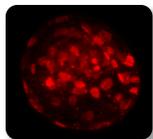


### Monday May 18<sup>th</sup>

- 9:30-10:30. Welcome and introduction to the course
- 10:30-12:00. What is epigenetics and how can epigenetics be studied?. Dr. Ann Van Soom
- 12:00-14:00. Lab session. Step I. Analysis of DNA methylthion profile by RRBS in human germ cell tumors. Dr. Elena Ivanova
- 14:00-15:30. Lunch time
- 15:30-17:30. Lab session. Step I. Continues DNA extraction Dr. Elena Ivanova

### Tuesday May 19<sup>th</sup>

- 9:30-11:00. Understanding how DNA methylation is patterned in gametes Dr. Gavin Kelsey
- 11:30-14:00. Lab session. Step II. MspI digestion. Dr. Elena Ivanova
- 13:30:15:00. Lunch time
- 15:30-17:30. Lab session. Step III. End repair/A-tailing and adapter ligation Dr. Elena Ivanova.



### Wednesday May 20<sup>th</sup>

- 9:30-11:00. Chromatin structure and epigenetics of the sperm cell. Dr. Rafael Oliva
- 11:30-12:30. Epigenetics re-programming through the germ cell development and gametogenesis. Dr. Sebastian Cánovas
- 12:30-14:00. Lab session. Step IV. EZ methylation. Direct kit. Dr. Elena Ivanova
- 14:00-15:30. Lunch time
- 15:30-17:30. Lab session. Step V. PCR amplification. Beads purification. Dr. Elena Ivanova

### Thursday May 21<sup>th</sup>

- 9:30-11:00. Epigenetics control Epigenetic control of LINE-1 retrotransposition in embryonic cells. Dr. José Luis García-Pérez
- 11:30-13:30. Epigenetics mechanisms involved in embryonic development and adaptation. Dr. Alfonso Gutiérrez Adán
- 12:30-14:00. Lab session. Step VI. Assessing the quality of the libraries (Bioanalyzer). Dr. Elena Ivanova
- 14:00-15:30. Lunch time
- 15:30-17:30. Lab session. Bioinformatic analysis of the results after HiSeq. Dr. Elena Ivanova

## Registration

The pre-registration period will be opened from February 7<sup>st</sup> to February 28<sup>th</sup> 2015. **Applicants should send an email to [mariaim@um.es](mailto:mariaim@um.es) including their CV.** The accepted applicants will be able to register from March 7<sup>th</sup> 2015. **The COST ACTION EPICONCEPT (FA 1201) will provide 500€ grants to selected applicants according to their CVs.** The course will be free for the participants, including attendance to lectures, practical exercises and lab consumables. The official language of the course will be English. **The maximum number of participants will be 15.**

## Venue

The course will be held on Campus de Espinardo, University of Murcia, which is just a 15 minute tramride from the city center.

Theoretical and practical sessions will use different facilities from Veterinary Schools as well as from the Central Services for Research Support located on Campus

