



Annual Scientific Training: High Tech Enabling Methods

2nd-6th March, 2015

Venue: Utrecht University, Faculty of Veterinary Medicine

Programme

March 2nd **Martinus G. de Bruingebouw (Yalelaan 9): Room 0.019**

08:30 *Registration*

08:45-09:00 Welcome and Introduction (**Tom Stout and Paul Blank**)

Animal models and bioinformatics

09:00-09:45 The impact of small RNAs on germ cells and the next generation (**Rene Ketting**)

09:45-10:30 Using equine embryo transfer to examine effects of disturbance during early pregnancy on conceptus development (**Marta De Ruijter-Villani**)

10.30-11.00 *Coffee break*

11.00-11.45 The consequences of post-partum negative energy balance on bovine oocyte and embryo quality (**Hilde Aardema**)

11.45-12.30 Correlation measures between epigenetic and gene expression data for health and disease states (**Pietro Lio**)

12.30-14.00 *Lunch*

14.00-17.00 Practical workshops (90 minutes each)

“Large animal models for research into oocyte and embryo biology”

Station 1: Ultrasonography of bovine ovaries and ovum pick-up

Station 2: Hysteroscopy and non-surgical uterine flushing to recover embryos, conceptuses and uterine samples from mares

March 3rd: **EpiHealthNet Mid-term Meeting**

All day – see Mid-term meeting programme

March 4th **Martinus G. de Bruingebouw (Yalelaan 9): Room 1.069**

Animal and *in vitro* models

08:45 *Registration*

09:00-09:45 Mouse models of accelerated ageing (**Alain de Bruin**)

09:45-10:30 Replacing animal experiments with *in vitro* and theoretical models (**Bas Blaauboer**)

- 10.30-11.00 *Coffee break*
- 11.00-11.45 Stem cells for functional recovery of liver disease (**Bart Spee**)
- 11.45-12.30 *In vitro* models for analysing gamete interaction (**Heiko Henning**)
- 12:30-13:30 *Lunch*

Afternoon excursion

March 5th Martinus G. de Bruingebouw (Yalelaan 9): Room 1.061

08:45 *Registration*

Reproductive biology *in vitro*

- 09:00-09:45 *In vitro* oocyte maturation and embryo production (**Ann van Soom**)
- 09:45-10:30 Use of reproductive cells in toxicology testing (**Aldert Piersma**)
- 10.30-11.00 *Coffee break*
- 11.00-11.45 Implementing the 3 'Rs' in the planning of biological research (**Harry Blom**)
- 11.45-13.15 *Lunch*
- 13.15-14.00 Developing an expression signature to predict outcome of IVF treatment (**Frank Holstege**)
- 14.00-17.00 Practical workshops (90 minutes each)

"*In vitro* gamete assessment and manipulation"

- Station 1: Oocyte recovery, assessment and preparation for fertilization
- Station 2: Semen analysis

March 6th Martinus G. de Bruingebouw (Yalelaan 9): Room 1.061

Biology of pluripotency

- 08:45 *Registration*
- 09:00-09:45 Biology of iPS / ES cells (**Niels Geijsen**)
- 09:45-10:30 Pluripotency in the light of the developmental hourglass (**Ewart Kuijk**)
- 10.30-11.00 *Coffee break*
- 11.00-11.45 Approaches to the study of pluripotency (**Bas Brinkhof**)
- 11:45-13.00 *Lunch*
- 13.00-17.00 Practical workshops (Introduction and demonstrations)

Nieuw Gildesteijn – colloquium (room 201)

Confocal microscopy & Flow cytometry (**Center for Cell Imaging**)