

# Mitosis and Nuclear Structure

Wiston House • West Sussex • 23 – 26 June 2013



Programme

Sunday 23 June 2013

- 12:30 – 14:00 Lunch
- 14:00 – 14.15 **Introductions:**  
The Company of Biologists – **Tim Hunt**  
Workshop – **Katherine Wilson, Timothy Mitchison and Michael Rout**

## Session 1: New Perspectives

Chair – **Tom Misteli**

- 14:15 – 14:55 **Katherine Wilson**  
Nuclear structure and mitosis: new perspectives
- 14:55 – 15:35 **Timothy Mitchison**  
Proteomic analysis of spindle-like arrays from *Xenopus* eggs
- 15:35 – 16:15 Tea break
- 16:15 – 16:55 **Michael Rout**  
Structure, function, and evolution of the NPC
- 16:55 – 17:35 **Damien Devos**  
Microbiology's platypus
- 18:00 – 19:30 Pre-dinner drinks and poster session
- 19:30 – 21:00 Dinner
- 21:00 – 22:00 Slide presentations
- 21:00 – 23:30 Bar open

All meals will be served in **The Great Hall**

## Programme

**Monday 24 June 2013**

08:00 – 09:00 Breakfast

### **Session 2: Chromosome Segregation**

**Chair – Yixian Zheng**

- 09:00 – 09:40 **David Sherratt**  
Bacterial chromosome organization and segregation
- 09:40 – 10:20 **Christine Jacobs-Wagner**  
Chromosome dynamics in bacteria
- 10:20 – 11:00 Group photo  
Tea break
- 11:00 – 11:40 **Yosef Gruenbaum**  
Roles for nuclear lamina proteins in mitosis and meiosis
- 11:40 – 12:20 **Kristen Johansen**  
Nuclear proteins reorganize during mitosis to form an elastic spindle matrix
- 12:30 – 13:30 Lunch
- 13:30 – 15:00 Walk (meet at Reception)
- 15:00 – 15:30 Tea break

### **Session 3: Membrane Proteins and Chromosomes**

**Chair – Catherine Dargemont**

- 15:30 – 16:10 **Rebecca Heald**  
REEP3/4 proteins clear endoplasmic reticulum from metaphase chromosomes and ensure proper nuclear envelope architecture
- 16:10 – 16:50 **David Evans**  
Variations on a theme: the higher plant nuclear envelope in mitosis
- 16:50 – 17:30 **Brian Burke**  
The missing LINC: nuclear membrane proteins and meiotic chromosome dynamics
- 18:00 – 18:45 Pre-dinner drinks
- 18:45 – 19:30 History talk on Wiston House
- 19:30 – 21:00 Dinner
- 22:00 – 23:30 Bar open

All meals will be served in **The Great Hall**

## Programme

Tuesday 25 June 2013

08:00 – 09:00 Breakfast

### Session 4: Nucleoporins, Ran and Mitosis

Chair – Martin Hetzer

09:00 – 09:40

**Valérie Doye**

The Y-complex, a key nuclear pore subunit in cell cycle and differentiation

09:40 – 10:20

**Catherine Dargemont**

Yeast nuclear pore complex, post-translational modifications and cell cycle: intriguing interplay

10:20 – 11:00

Tea break

11:00 – 11:40

**Mary Dasso**

Regulating Ran in mitosis

11:40 – 12:20

**Erica Golemis**

Bridges between mitosis and the ciliary cycle in cancer and ADPKD

12:30 – 13:30

Lunch

### Session 5: Lamins: Evolving Views

Chair – Kristen Johansen

14:00 – 14:40

**Yixian Zheng**

Lamins in mitosis and interphase in the context of tissue building

14:40 – 15:20

**Ralph Gräf**

A lamin in lower eukaryotes?

15:20 – 16:00

Tea break

16:00 – 16:40

**Mark Field**

Antigenic variation, epigenetics and trypanosomes

16:40 – 18:30

Break

18:30 – 19:30

Pre-dinner drinks

19:30 – 21:30

Dinner

21:30 – 00:00

Bar open

All meals will be served in **The Great Hall**

## Programme

Wednesday 26 June 2013

08:00 – 09:00 Breakfast

### Session 6: Nuclear Membrane Proteins

Chair – David Evans

09:00 – 09:40

**Tom Misteli**

Non-random genome organization

09:40 – 10:20

**Eric Schirmer**

Tissue-specific NE proteins contribute to differentiation by influencing gene expression through spatial organisation of the genome

10:20 – 11:00

Tea break

11:00 – 11:40

**Martin Hetzer**

Catastrophic nuclear envelope collapse in cancer cell micronuclei

11:40 – 12:00

Overview of workshop

12:00 – 13:00

Lunch

Depart



All meals will be served in **The Great Hall**