

# Workshop Programme



## Eukaryo-/Archaeogenesis: Where Do We Stand?

8 – 11 March 2015

Wiston House • West Sussex • UK



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& Mechanisms

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# Eukaryo-/Archaeogenesis: Where Do We Stand?

8 – 11 March 2015 • Wiston House • West Sussex



**Sunday 8 March 2015**

12:30 – 14:00	Lunch	
14:00 – 14:10	<b>Claire Moulton</b>	Who are The Company of Biologists?
14:10 – 15:45	<b>Céline Brochier-Armanet and Damien P. Devos</b>	Discussion session
15:45 – 16:30	Tea break	
	<b>Chair – David Moreira</b>	
16:30 – 17:00	<b>Puri López-García</b>	Open questions on the origin of eukaryotes
17:00 – 17:30	<b>Roger Buick</b>	Chemical fossil evidence for the early evolution of eucarya and archaea
17:30 – 18:00	<b>Andrew Roger</b>	The origin of eukaryotes and mitochondria: theories and evidence
18:00 – 18:15	<b>Fabrizia Stavru</b>	From intracellular bacteria to mitochondria and back again
18:15 – 19:30	Pre-dinner drinks and poster session	
19:30 – 21:00	Dinner	
21:00 – 22:00	Introduction slide presentations	
22:00 – 23:30	Bar open	



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

## Monday 9 March 2015

08:00 – 09:00	Breakfast	
	<b>Chair – Mark Field</b>	
09:00 – 09:30	<b>Emmanuelle Javaux</b>	Interpreting the fossil record of early eukaryotes
09:30 – 10:00	<b>Anthony Poole</b>	Emergence of RNA editing in a long-term evolution experiment
10:00 – 10:15	<b>Guifré Torruella</b>	Opisthokonts and their relatives: a clue to understanding early eukaryote diversification
10:15 – 10:30	<b>Mukund Thattai</b>	Hybridization as a source of novel organelles in eukaryote evolution
10:30 – 11:15	Group photo Tea break	
11:15 – 11:45	<b>Sandra Baldauf</b>	The perils and pitfalls of untested assumptions
11:45 – 12:15	<b>Laura Eme</b>	Pinpointing the root of extant eukaryotic diversity
12:15 – 12:30	<b>Romain Derelle</b>	The root of the eukaryotic tree
12:30 – 13:30	Lunch	
13:30 – 15:30	Walk (meet at Reception)	
15:30 – 16:00	Tea break	
	<b>Chair – Simonetta Gribaldo</b>	
16:00 – 16:30	<b>Stuart MacNeill</b>	Eukaryo/archaeal CMG components: structural, functional and evolutionary variations on a theme
16:30 – 17:00	<b>Steve Bell</b>	Archaeal chromosome dynamics
17:00 – 17:30	<b>Finn Werner</b>	Evolutionary conserved mechanisms of transcription – from molecules to systems
18:00 – 18:45	Pre-dinner drinks	
18:45 – 19:30	History talk on Wiston House	
19:30 – 21:00	Dinner	
21:00 – 22:00	Discussion	
22:00 – 23:30	Bar open	



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## Tuesday 10 March 2015

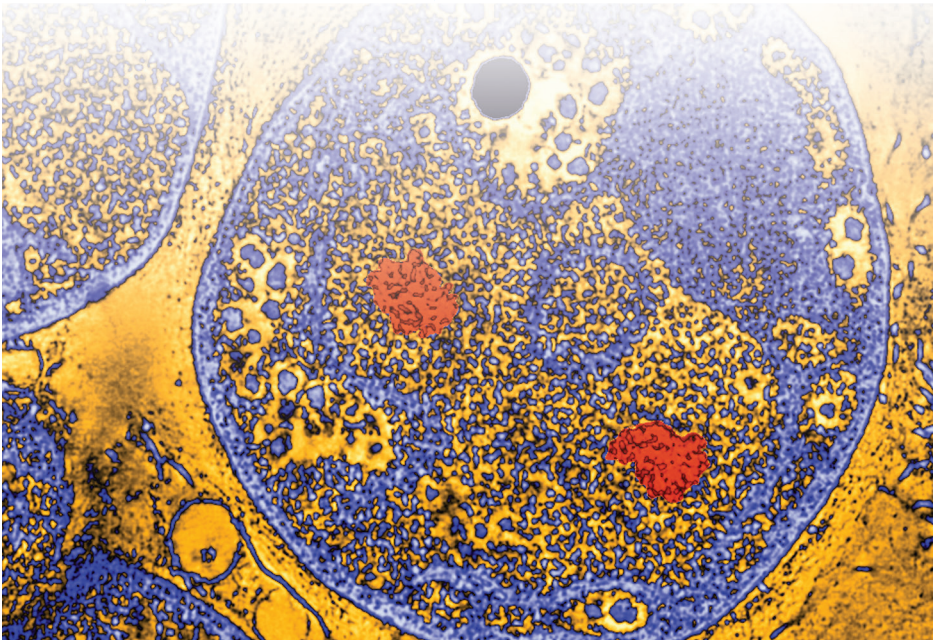
08:00 – 09:00	Breakfast	
	<b>Chair – Puri López-García</b>	
09:00 – 09:30	<b>Bettina Siebers</b>	The archaeal carbohydrate metabolism: unique traits and challenges
09:30 – 10:00	<b>Céline Brochier-Armanet</b>	The evolutionary origin of eukaryotes: a phylogenomic perspective
10:00 – 10:30	<b>Thijs Ettema</b>	A missing link in the prokaryote-to-eukaryote transition
10:30 – 11:10	Tea break	
11:10 – 11:40	<b>David Moreira</b>	The root of the archaea and its evolutionary implications
11:40 – 11:55	<b>Mathieu Groussin</b>	Do the origins of major archaeal clades really correspond to massive gene acquisitions from bacteria?
11:55 – 12:10	<b>Greg Fournier</b>	Horizontal gene transfer with partial orthologous displacement in conserved gene datasets impacts phylogenetic investigations of eukaryogenesis
12:10 – 13:30	Lunch	
	<b>Chair – Joel Dacks</b>	
13:30 – 14:00	<b>Simonetta Gribaldo</b>	Archaea and the two-domains versus three-domains tree of life
14:00 – 14:30	<b>Tom Williams</b>	Phylogenomic approaches to understanding the origins of eukaryotes and archaea
14:45 – 15:30	Tea break	
15:30 – 16:00	<b>Damien P. Devos</b>	How microbiology's platypus can inform eukaryo- and archaeogenesis
16:00 – 16:15	<b>Victor Sojo</b>	On the divergence of archaeal and bacterial membranes
16:15 – 16:30	<b>Buzz Baum</b>	The origin of eukaryotic cell organisation: inside-out or outside-in
16:30 – 16:45	<b>Jonathan Lombard</b>	The sweet tip of the iceberg: the intriguing evolution of cell surface glycosylations in the three domains of life
16:45 – 18:00	Free time	
18:00 – 19:30	Pre-dinner drinks	
19:30 – 21:30	Dinner	
21:30 – 00:00	Bar open	



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## Wednesday 11 March 2015

08:00 – 09:00	Breakfast	
	<b>Chair – Emmanuelle Javaux</b>	
09:00 – 09:30	<b>Mark Field</b>	Evolution of the nuclear envelope: insights from divergent eukaryotes on mechanisms for regulating gene expression
09:30 – 10:00	<b>Joel Dacks</b>	Towards a theory for the evolution of the eukaryotic membrane-traffic system
10:00 – 10:15	<b>Richard Gouy</b>	Simplicity is the ultimate sophistication - the eukaryotic nucleus: innovation or vestige from a lost world?
10:15 – 10:30	<b>Ludek Koreny</b>	Evolution of the nuclear lamina
10:30 – 11:00	Tea break	
11:00 – 12:00	<b>Céline Brochier-Armanet and Damien P. Devos</b>	Discussion session
12:00 – 13:00	Lunch	
	Depart	



Thin section of *Gemmata obscuriglobus* with numerous membrane invaginations. Cytoplasm is yellow, periplasm is blue, DNA is red, Polyphosphate inclusion is black, from Santarella-Mellwig et al., PLoS Biol 2013 11:e1001565. False coloring by Harald Engelhardt

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## Upcoming Workshops

### Getting Into and Out of Mitosis

Sunday 10 – Wednesday 13 May 2015

**Organisers:** *Iain Hagan and Jonathon Pines*

### Transgenerational Epigenetic Inheritance

Sunday 4 – Wednesday 7 October 2015

**Organisers:** *Edith Heard and Ruth Lehmann*

### Transdifferentiation and Tissue Plasticity in Cardiovascular Rejuvenation

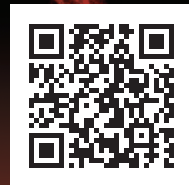
Sunday 7 – Wednesday 10 February 2016

**Organisers:** *Brian Black and James Martin*

All held at Wiston House, West Sussex, UK

\* Terms and conditions apply

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Credit: 3D Vascularized Tumor Model (Christopher Hughes)

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