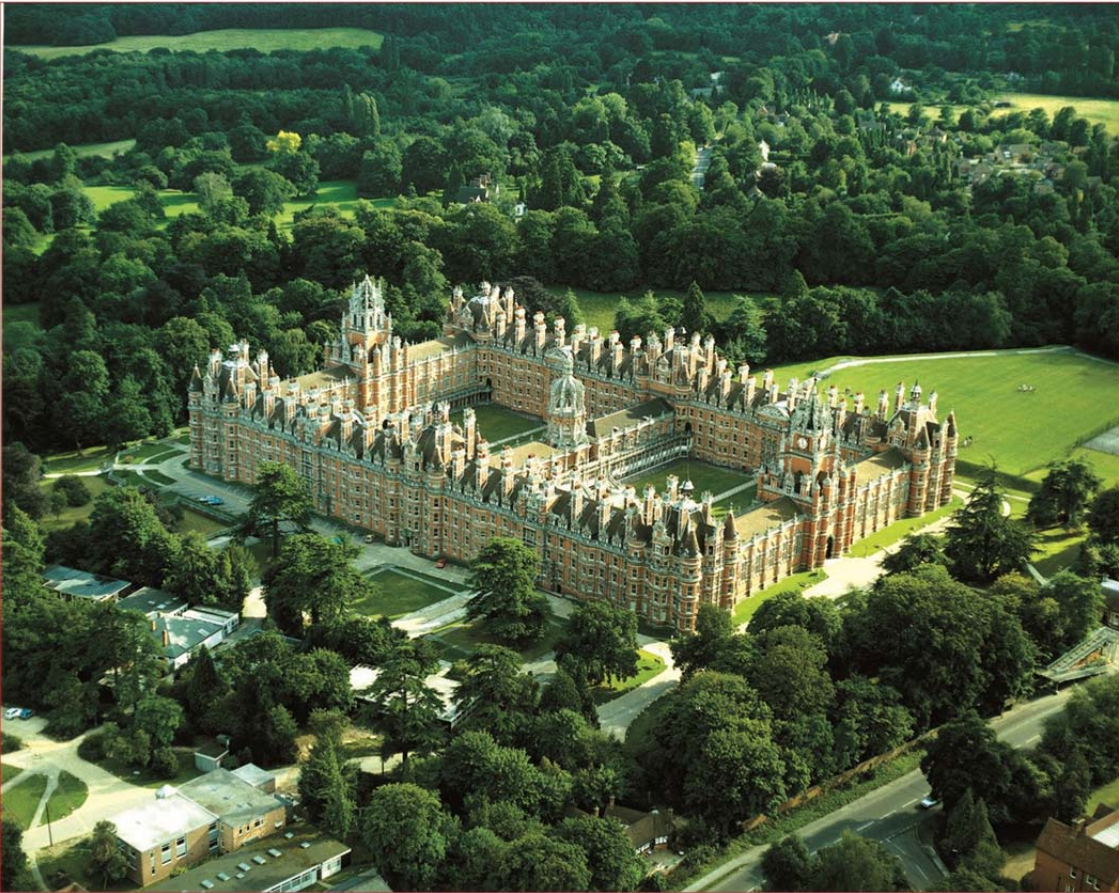


# Dicty 2015



Royal Holloway University of London

August 9th–13th

London, United Kingdom

# Annual Dictyostelium Conference

# 2015

August 9-13


Royal Holloway University of London

Organisers  
Robin Williams  
Arjan Kortholt  
Douwe Veltman

# Map and information



 Founders Building  
 - Dining room  
 - Crosslands Suite  
 - Picture Gallery

 Windsor Building

 The HUB Reception

 Tuke Hall Accommodation

All talks are held in the Windsor Auditorium (Windsor Building).

Accommodation check-in:	Sunday, The Hub Reception
Registration:	Sunday, Windsor Building
Breakfast:	Mon-Thur 7.30-9am, Founders Dining Room
Lunch:	Windsor Building
Dinner:	Sun 18.00-19.30, Founders Dining Room
	Mon-Tue 18.30-20.00, Founders Dining room
Bar Service:	Sun 19.00-21.00, Crosslands Suite
	Mon-Tue 19.30-23.00 Crosslands Suite
Poster Sessions:	Mon-Tue 20.00-21.30, Windsor Building
Conference Banquet:	Wed, Reception 18.30-19.00 Picture Gallery
	Banquet 19.15-21.00 Founders Dining Room
	English Village Dance 21.00-23.00

Contact:	CMS@rhul.ac.uk
Organisers mobile:	+44(0)7946548516
(emergency only)	

## Conference programme

Sunday 9th	Monday 10th	Tuesday 11th	Wednesday 12th	Thursday 13th
	Biomedical and Host & Pathogen	Chemotaxis and Development I	Cytokinesis and Nuclear Organization	Chemotaxis and Development II
	09.30-10.40 1st morning session	09.00-10.40 1st morning session	09.00-10.40 1st morning session	09.30-10.40 1st morning session
	coffee break	coffee break	coffee break	coffee break
	11.10-12.30 2nd morning session	11.10-12.30 2nd morning session	11.10-12.30 2nd morning session	11.10-12.30 2nd morning session
12.00-18.00 Arrival and Registration	lunch break	lunch break	12.30-17.30 Pick up lunch pack  Excursion Windsor Castle or Fuller's Griffin Brewery	12.30-13.45 lunch
	14.00-15.10 1st afternoon session	14.00-15.10 1st afternoon session		Departure
	coffee break	coffee break		
	15.40-17.00 2nd afternoon session	15.40-17.00 2nd afternoon session		
17.00-18.00 Selected Student Talks				
18.00-19.30 Dinner	18.30-20.00 Dinner	18.30-20.00 Dinner	18.30-23.00 Conference Dinner and English Village Dance	
	20.00-21.30 Poster Session I odd numbers	20.00-21.30 Poster Session II even numbers		

## Sunday, August 9

---

- 12.00 Registration desk open until 18.00
- 17.00 1 Dicty Jails: a new tool for long-term single-cell imaging. **Ana Teresa López Jiménez**
- 17.30 2 Src1 a protein of the inner nuclear membrane is interacting with the lamin-like protein NE81 in Dictyostelium discoideum. **Petros Batsios**
- 18.00 Dinner

## **Monday, August 10      BIOMEDICAL & HOST PATHOGEN INTERACTIONS**

---

### Morning session chair: Adrian Harwood

- 09.30 3 Dictyostelium as a biomedical model: Understanding the MCT ketogenic diet. **Robin Williams**
- 10.00 4 Roco4: A model to investigate LRRK2 inhibitor binding. **Bernd Gilsbach**
- 10.20 5 Impedance spectroscopy of Dictyostelium discoideum development: from collective oscillations to single cell adhesion dynamics. **Marco Tarantola**
- 10.40-11.10      coffee break
- 11.10 6 Cell death in Dictyostelium: investigations on causality. **Pierre Golstein**
- 11.30 7 How Ligand Breakdown Shapes and Potentiates Chemotactic Gradients. **Robert Insall**
- 11.50 8 Towards the Application of CRISPR for Whole Gene and Nucleotide-Specific Mutagenesis. **Alan Kimmel**
- 12.10 9 Amoeba Tastes Bitter: A Novel Non Animal Model for Bitterness Research. **Marco Cocorocchio**
- 12.30-14.00      lunch

### Afternoon session chair: Annette Müller-Taubenberger

- 14.00 10 Bacteria capture and killing by NOX-dependent DNA extracellular traps predates the evolution of animals. **Thierry Soldati**
- 14.30 11 Identification of macrame - a Novel regulator of microtubule dynamics and lysosomal trafficking. **Jason King**
- 14.50 12 Nutritional immunity and iron homeostasis in Dictyostelium. **Salvatore Bozzaro**
- 15.10-15.40      coffee break
- 15.40 13 Interactions between amoebae and non-pathogenic bacteria: a genetic approach. **Pierre Cosson**
- 16.00 14 Is the TOR pathway controlled by Mycobacterium marinum? **Elena Cardenal-Muñoz**
- 16.20 15 The Crop Sows the Farmer: Burkholderia bacteria infectiousy induce the proto-farming symbiosis of Dictyostelium amoebae and food bacteria. **Susanne DiSalvo**
- 16.40      Flash talks
- 17.00-18.30      Break
- 18.30-20.00      Dinner
- 20.00-21.30      Poster Session I - odd numbers

Morning session chair: Peter van Haastert

09.00 16 Systems biology of cellular rhythms: from microorganisms to mammalian cells. **Albert Goldbeter**

09.30 17 Identification of a novel chemoattractant GPCR that regulates both chemotaxis and phagocytosis. **Tian Jin**

10.00 18 A pseudopod-centred model for cell migration also replicates phagocytosis (plus a bit of amplification). **Matthew Neilson**

10.20 19 Understanding cell movement in the back of traveling waves of chemoattractant. **Monica Skoge**

10.40-11.10 coffee break

11.10 20 Investigating the effects of inositol depletion in Dictyostelium. **Anna Frej**

11.30 21 Function of Rho GTPase in Gradient Sensing. **Hiroshi Senoo**

11.50 22 Regulation of Population Density in Dictyostelium by Extracellular Polyphosphate. **Patrick Suess**

12.10 23 Why does Dictyostelium discoideum have so many identical actin genes? **Edward Tunnacliffe**

12.30-14.00 lunch

Afternoon session chair: Richard Gomer

14.00 24 Noise dampening is required for robust cell fate oscillator dynamics. **Chris Thompson**

14.30 25 Gene regulation by c-di-GMP in Dictyostelid social amoebas. **Zhi-hui Chen**

14.50 26 A novel ubiquitin like domain containing protein is required for early development and cAMP propagation in D.discoideum. **Satoshi Kuwana**

15.10-15.40 coffee break

15.40 27 The new face of dictyBase. **David Jimenez-Morales**

16.00 28 Characterization of Dictyostelium genes by parallel phenotyping of barcoded mutants. **Adam Kuspa**

16.20 Flash talks

16.40 29 Introducing a new dictyExpress:from raw reads to gene expression browsing. **Miha Stajdohar** and **Blaz Zupan**

17.00-18.30 Break

18.30-20.00 Dinner

20.00-21.30 Poster Session II - even numbers

**Wednesday, August 12      CYTOKINESIS AND NUCLEAR ORGANIZATION**

---

Morning session chair: Jonathan Chubb

- 09.00 30 Cell shape through the cell cycle. **Buzz Baum**
- 09.30 31 The STE group kinase SepA controls cell migration and cleavage furrow formation. **Annette Müller-Taubenberger**
- 10.00 32 ADP-ribosylation of histone H2B in repair of DNA double strand breaks. **Catherine Pears**
- 10.20 33 Measurement and modelling of stochastic transcription dynamics. **Adam Corrigan**
- 10.40-11.10      coffee break
- 11.10 34 Spacing Remodelers in Dictyostelium Control Transcription Through Distinct Effects on Nucleosome Size, Positioning and Occupancy. **Mark Robinson**
- 11.30 35 Proteolytic regulation in Dictyostelium mitochondria. **Elinor Thompson**
- 11.50 36 C-module-binding factor supports retrotransposition of TRE5-A by suppressing an RNAi pathway. **Thomas Winckler**
- 12.10 37 REMI-seq – generation of a genome-wide mutant resource for Dictyostelium functional genomics. **Amy Baldwin**
- 12.30      Pick up lunch pack
- 13.00      Departure for Windsor Castle and Fuller's Griffin Brewery
- 18.30      Reception, Picture Gallery,  
Banquet, Founders Dining Room  
English Village Dance



Morning session chair: Elinor Thompson

09.30 38 Formin A function during migration in confined environments. **Jan Faix**

10.00 39 Polychromatic 'greenbeard' genes determine patterns of aggregation in a social amoeba. **Nicole Gruenheit**

10.20 40 Locally Regulated Ras Signaling Reveals Inhibitory Process in GPCR-mediated Chemotaxis. **Xuehua Xu**

10.40-11.10 coffee break

11.10 41 A Cud-type transcription factor regulates Dictyostelium spore differentiation. **Yoko Yamada**

11.30 42 Ras activation during cell movement in buffer and chemotaxis. **Peter van Haastert**

11.50 43 The Protein Kinase C Orthologue PkcA Regulates the Actin Cytoskeleton. **Derrick Brazill**

12.10 44 Macropinosomes and pseudopods are associated with distinct spatial patterns of PIP<sub>3</sub> and SCAR/WAVE. **Douwe Veltman**

12.30-13.45 lunch

Departure