

Metabolism in Development and Disease

15 – 18 May 2016
Wiston House
West Sussex



Sunday 15 May 2016

12:30 – 14:00	Lunch	
14:00 – 14:10	Claire Moulton	Who are The Company of Biologists?
14:10 – 14:30	Craig Thompson	Workshop introduction
Chair: Alex Gould		
14:30 – 15:15	Oliver Pourquié	Integrating signalling with metabolism during embryo patterning
15:15 – 16:00	Suzanne Eaton	Hedgehog signalling and metabolism in the Drosophila wing disc
16:00 – 16:40	Tea break	
16:40 – 17:25	Ralph DeBerardinis	Establishing metabolic phenotypes in cancer cells
17:25 – 18:10	Naomi Taylor	Fueling HSC lineage commitment by manipulating cell metabolism
18:10 – 18:25	Gregory Ducker	Genetic and metabolomic dissection of one-carbon metabolism
18:25 – 19:30	Pre-dinner drinks	
19:30 – 21:00	Dinner	
21:00 – 22:00	Introduction slide presentations	
22:00 – 23:30	Bar open	

All meals served in **The Great Hall**

Monday 16 May 2016

08:00 – 09:00 Breakfast

Chair: Paola Chiarugi

09:00 – 09:45 **Doreen Cantrell** The control of T cell metabolism and differentiation

09:45 – 10:30 **Craig Thompson** Linking metabolism to the control of cellular differentiation

10:30 – 10:45 **Yaoyao Chen** Pluripotent state transitions and metabolic reprogramming

10:45 – 11:00 **Ben Steventon** Comparative developmental dynamics of neuromesodermal progenitors and axial elongation in vertebrates

11:00 – 11:30 Group photo
Tea break

11:30 – 12:15 **Laura Johnston** Sensing and responding to cell fitness differences within a growing tissue

12:15 – 13:00 **Pierre Magistretti** Neuron-glia metabolic coupling: role in neuronal plasticity and neuroprotection

13:00 – 13:15 **Carlos Carmona-Fontaine** Extracellular metabolites are morphogens that organize the tumour microenvironment

13:15 – 14:15 Lunch

14:15 – 16:00 Walk (meet at Reception)

16:00 – 16:30 Tea break

Chair: Laura Johnston

16:30 – 17:15 **Bill Harris** Nutrients, oxygen and the growth of the retina in frogs and fish

17:15 – 18:00 **Christian Klämbt** Sugar transport across the blood-brain barrier and energy homeostasis in the Drosophila brain: implications for neuronal networks

18:00 – 18:45 **Aurelio Teleman** Regulation of metabolism by stearic acid

18:45 – 19:15 Pre-dinner drinks

19:15 – 20:00 History talk on Wiston House

20:00 – 21:30 Dinner

21:30 – 23:30 Bar open

All meals served in **The Great Hall**

Tuesday 17 May 2016

08:00 – 09:00 Breakfast

Chair: Aurelio Teleman

09:00 – 09:45	Alex Gould	Coping with a stressful start in life
09:45 – 10:30	Teymuraz Kurzchalia	Metabolic transitions in <i>C.elegans</i> : from full metabolism to hypometabolism and back
10:30 – 10:45	Jonathan Rodenfels	The energetic cost and efficiency of early vertebrate development

10:45 – 11:25 Tea break

11:25 – 12:10	Ben Tu	What is TORC really doing to metabolism? Implications for development and disease
12:10 – 12:55	Wilhelm Palm	How mammalian cells regulate amino acid acquisition
12:55 – 13:10	Paola Falletta	An evolutionary conserved starvation response drives melanoma invasiveness and tumorigenesis

13:10 – 14:15 Lunch

Chair: Naomi Taylor

14:15 – 15:00	Eyal Gottlieb	Exposing and exploiting cancer's metabolic vulnerabilities
15:00 – 15:15	Lucas Sullivan	Supporting aspartate biosynthesis is an essential function of respiration in proliferating cells
15:15 – 15:30	Patricia Nunes	Hepatic glucose production during mouse hepatocellular carcinoma development

15:30 – 16:00 Tea break

16:00 – 16:45	Diane Barber	Regulation of intracellular pH dynamics – from molecules to cancer cell behaviors
16:45 – 17:00	Jelle van den Aamele	Metabolic reprogramming during neurogenesis
17:00 – 17:15	Yi Feng	Live imaging metabolism changes during tumour initiation in zebrafish

17:15 – 18:30 Free time

18:30 – 19:30 Pre-dinner drinks

19:30 – 21:30 Dinner

21:30 – 00:00 Bar open

All meals served in **The Great Hall**

Wednesday 18 May 2016

07:30 – 08:30 Breakfast

Chair: Eyal Gottlieb

08:30 – 09:15 **Paola Chiarugi** Tumor microenvironment and therapy resistance: OXPHOS as a central player

09:15 – 10:00 **Catarina Homem** A shift in metabolic profile uncouples cell cycle from cell growth to end proliferation in *Drosophila* neural stem cells

10:00 – 10:45 **Peter Ratcliffe** Hypoxia signalling pathways

10:45 – 11:30 Tea break

11:30 – 12:00 **Suzanne Eaton and Wilhelm Palm** Workshop overview

12:00 – 13:00 Lunch
Depart

All meals served in [The Great Hall](#)