



SPHINGONET SUMMER SCHOOL & WORKSHOP

Sphingolipid Biology & Disease

Merton College Oxford, July 10-13, 2013



Organizing committee

Fran Platt – UOXF | Tim Levine – UCL | Howard Riezman – UNIGE | Matthijs Kol - UOS | Joost Holthuis – UOS

Funding



www.sphingonet-itn.eu

VENUE & PRACTICALITIES

Merton College

Merton St, Oxford OX1 4JD

United Kingdom

Phone: +44 1865 276310

Travel directions

See: www.merton.ox.ac.uk/aboutmerton/visitorinfo.shtml. A bus service called The Airline (<http://airline.oxfordbus.co.uk>) runs every 20 min from London Heathrow Airport. You can buy tickets on the bus or order online. Get off at the High Street Stop/Queens Lane. Merton College is very close by (see below).

Site map



Wi-Fi Access at Merton

User Group	Account Name	Password	Expiration Time
Conferences	EUMC2013	eumc2013	2013-07-14 12:00:

PROGRAM

WEDNESDAY 10 JULY (Arrival)

noon: arrival fellows

13:00 – 18:00 **Wikipedia Workshop Fellows**

afternoon/evening: arrival PIs & external speakers

18:30 – 19:30 **WELCOME RECEPTION** (sparkling wine, welcome by Fran & Joost)

19:30 – 21:30 Dinner (Merton College)

THURSDAY 11 JULY (Summer School Day 1)

08:45 – 09:00 **INTRODUCTION** / Fran Platt & Joost Holthuis

09:00 – 10:00 **Lecture 1** / Thomas Kirkegaard - *Orphazyme, from basic biology to biotech. Starting a biotech company in the new era.*

10:00 **SESSION I - FUNDAMENTALS OF SPHINGOLIPID BIOLOGY** / Chair: Doris Höglinger

10:00 – 11:00 **Lecture 2** / Howard Riezman - *Sterol and sphingolipid homeostasis and functions in yeast*

11:00 – 11:15 Coffee break

11:15 – 11:30 **POSTER FLASHES I** / Fellows 1-3 (3 x 5 min)

11:30 – 12:30 **Lecture 3** / Tony Futerman - *Mammalian ceramide synthases: why are there so many and what do they all do?*

12:30 – 13:30 Lunch*

13:30 **SESSION II - SPHINGOLIPID & STEROL TRANSPORT** / Chair: Luc Henry

13:30 – 14:30 **Lecture 4** / Anant Menon - *Mechanisms of intracellular lipid transport*

14:30 – 15:30 **Lecture 5** / Tim Levine - *Two smoking guns in intracellular lipid traffic: specialized proteins and specialised structures*

15:30 – 15:45 Tea break

15:45 – 16:00 **POSTER FLASHES II** / Fellows 4-6 (3 x 5 min)

16:00 **SESSION III - SPHINGOLIPID SIGNALING** / Chair: Birol Cabukusta

16:00 – 17:00 **Lecture 6** / Yusuf Hannun - *Bioactive sphingolipids, sphingolipid metabolism and cell regulation*

17:00 – 17:30 **GENERAL DISCUSSION I - Emerging concepts & controversies** / Discussion leader: Matthijs Kol

17:30 – 19:30 **POSTER SESSION I** - with refreshments and finger food

18:00 – 19:30 **PI management meeting** (Ian Taylor room)

18:30 – 19:30 **Young Research Council meeting** (David Harvey room)

20:00 – 22:00 Dinner (Merton College)

* Sphingonet fellows join invited speakers for lunch according to Tutorial Lunch Schedule on p. 7

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FRIDAY 12 JULY (*Summer School Day 2*)

- 09:00 **SESSION III - SPHINGOLIPID SIGNALING** - continued / Chair: Birol Cabukusta
09:00 – 10:00 **Lecture 7** / Richard Kolesnick - *Ceramide signaling of cell death: emerging role of ceramide in the conceptualization of cancer therapy*
10:00 – 11:00 **Lecture 8** / Sarah Spiegel - *Sphingosine-1-P signaling in health and disease*
11:00 – 11:15 Coffee break
11:15 – 11:30 **POSTER FLASHES III / Fellows 7-9** (3 x 5 min)
11:30 – 12:30 **Lecture 9** / Lina Obeid - *Bioactive sphingolipids role and regulation in cancer*
12:30 – 13:30 Lunch*
13:30 – 13:45 **POSTER FLASHES IV / Fellows 10-11** (2 x 5 min)
13:45 **SESSION IV - SPHINGOLIPID TURNOVER / Chair: Augustinus Galih**
13:45 – 14:45 **Lecture 10** / Konrad Sandhoff - *Sphingolipids, sphingolipidoses & the lipid phase problem*
14:45 – 15:00 Tea break
15:00 – 16:00 **Lecture 11** / Fran Platt - *Niemann Pick Type-C disease; a complex lysosomal storage disorder with unexpected links to other diseases*
16:00 – 16:30 **GENERAL DISCUSSION II - Emerging concepts & controversies** / Discussion leader: Howard Riezman
16:30 **GROUP PICTURE** (location to be announced)
16:30 – 19:00 **POSTER SESSION II** - with refreshments and finger food
20:00 – 22:00 **Summer School Banquet** (Merton College)

SATURDAY 13 JULY (*Workshop "Pre-clinical Research: from bench to bedside"*)

- 09:00 **SESSION I - SPHINGOLIPID METABOLIC ENZYMES AS DRUG TARGETS** / Chair: Thomas Antoine
09:00 – 09:30 Yusuf Hannun / *Possibilities & limitations of sphingolipid metabolic enzymes as drug targets*
09:30 – 10:00 Richard Kolesnick / *Clinical translation of sphingomyelinase/ceramide signaling to Phase I trials*
10:00 – 10:30 Sarah Spiegel / *Targeting sphingosine-1-P in hematologic malignancies*
10:30 – 10:50 Coffee break
10:50 **SESSION II - DEVELOPMENT OF THERAPIES FOR SPHINGOLIPID METABOLIC DISORDERS** / Chair: Allie Colaco
10:50 – 11:20 Konrad Sandhoff / *Amaurotic idiocy and the discovery of five ganglioside storage diseases*
11:20 – 11:50 Fran Platt / *Bench to bedside in academia: the miglustat experience*
11:50 – 12:30 Tim Cox / *Developing treatment for a sphingolipid disorder*
12:30 – 13:30 Lunch*
13:30 **SESSION III – PATIENTS & PATIENT ORGANIZATIONS** / Chair: Fran Platt
13:30 – 14:00 Lina Obeid / *Personal accounts of a university physician & dean for research*
14:00 – 14:40 Will Evans / *A patient organization/parent perspective on sphingolipid-associated disease*

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SATURDAY 13 JULY - continued (*Workshop “Pre-clinical Research: from bench to bedside”*)

14:40 – 15:00 Tea break

15:00 – 16:00 **ROUND TABLE DISCUSSION** / Discussion leader: Joost Holthuis

16:00 – 18:00 **POSTER SESSION III** - with refreshments and finger food

19:00 – 21:00 Dinner (Merton College)

SUNDAY 14 JULY

Departure

TUTORIAL LUNCH SCHEDULE

Thursday 11 July

Group 1: Yusuf Hannun, Richard Kolesnick, Amrita Jain, Thomas Antoine, Efthymia Prifti, Davide Bertoldo

Group 2: Sarah Spiegel, Lina Obeid, Birol Cabukusta, Nicolas Lebesgue, Luc Henry, Doris Höglinger

Group 3: Konrad Sandhoff, Anant Menon, Alexandria Colaco, Augustinus Galih, Alberto Gatta

Friday 12 July

Group 1: Yusuf Hannun, Lina Obeid, Alexandria Colaco, Alberto Gatta, Augustinus Galih,

Group 2: Richard Kolesnick, Anant Menon, Birol Cabukusta, Nicolas Lebesgue, Luc Henry, Doris Höglinger

Group 3: Konrad Sandhoff, Sarah Spiegel, Amrita Jain, Thomas Antoine, Efthymia Prifti, Davide Bertoldo

Saturday 13 July

Group 1: Timothy Cox, Konrad Sandhoff, Yusuf Hannun, Nicolas Lebesgue, Birol Cabukusta, Luc Henry, Doris Höglinger

Group 2: William Evans, Sarah Spiegel, Richard Kolesnick, Alexandria Colaco, Augustinus Galih, Alberto Gatta

Group 3: Anant Menon, Lina Obeid, Thomas Antoine, Amrita Jain, Efthymia Prifti, Davide Bertoldo

POSTERS

NOTE THAT POSTER NUMBERS #1-11 CORRESPOND TO POSTER FLASHES BY FELLOWS #1-11 IN PROGRAM

(1) Tangier Disease and Niemann-Pick Type C disease: mechanistic convergence and shared therapeutic targets

Alexandria Colaco, Oscar Chen, Nada Al Eisa, Kerri-Lee Wallom, Danielle te Vruchte, Andrea Dardis, Annalisa Sechi, Stefania Zampieri, Lianne Davis, Anthony Morgan, Antony Galione, Daniel Ory, Bruno Bembi, Frances Platt

Department of Pharmacology, Merton College, University of Oxford, Oxford, OX1 3QT, United Kingdom

(2) A rapid and sensitive phosphoproteome screen for *Saccharomyces cerevisiae*

Nicolas Lebesgue^{*,†}, Alba Cristobal^{*,†}, Shabaz Mohammed^{*,†}, Joost C.M. Holthuis⁺, Arjen Scholten^{*,†}, Albert J.R. Heck^{*,†}

**Biomolecular Mass Spectrometry and Proteomics, Bijvoet Center for Biomolecular Research and Utrecht Institute for Pharmaceutical Sciences, Padualaan 8, 3584 CH Utrecht; †Netherlands Proteomics Centre, Padualaan 8, 3584 CH Utrecht; +Molecular Cell Biology Division, Universität Osnabrück, Barbarastrasse 13, 49076 Osnabrück*

(3) A fluorogenic probe for cell membrane proteins based on Nile Red

Efthymia Prifti, Luc Reymond, Kai Johnsson

Laboratory of Protein Engineering, Institute of Chemical Sciences and Engineering, EPFL, CH-1015 Lausanne, Switzerland

(4) Control of mitochondrial apoptosis by a candidate ceramide sensor in the ER

Birol Cabukusta¹, Fikadu Geta Tafesse², Ana Vacaru³ & Joost Holthuis¹

¹Molecular Cell Biology, University of Osnabrück, Barbarastrasse 13, 49076 Osnabrück, Germany; ²Whitehead Institute for Biomedical Research, Massachusetts Institute of Technology, Cambridge, MA 02142, USA;

³Department of Medicine ~ Division of Liver Diseases and Department of Developmental and Regenerative Biology, Ichan School of Medicine at Mount Sinai, New York 10029, USA

(5) Towards a membrane-based screen for the identification of small molecule protein interactions in yeast

Luc Henry^{1,2}, Nils Johnsson², Kai Johnsson¹

¹Laboratory of Protein Engineering, Institute of Chemical Sciences and Engineering, EPFL, CH-1015 Lausanne, Switzerland; ²Molecular Genetics and Cell Biology, University of Ulm, D-89081 Ulm, Germany

(6) Let's get StARTed: new families of StAR-related transfer domain proteins

Alberto T Gatta, Louise H Wong, Tim P Levine

Cell Biology, Institute of Ophthalmology, University College London, London EC1V 9EL, United Kingdom

(7) Roles of Deoxysphingoid Bases in HSAN IA: How unfaithful relationships end up in a life without pain

Augustinus Galih, Thomas Hannich, Howard Riezman

Department of Biochemistry, Sciences II, University of Genève, CH-1211 Genève 4, Switzerland

(8) FCCS-based assays for solubilised membrane proteins

Thomas Antoine, David Ott, Kerrin Hansen, Matthias Borgmann, Sven Hofmann, Annette Beck-Sicking, Frank Becker, Stefan Hannus

Intana Bioscience GmbH, D-82152 Planegg/Martinsried, Germany

(9) Tools for manipulating sphingolipid levels in living cells

Doris Höglinger, Per Haberkant, Carsten Schultz

Cell Biology and Biophysics Unit, EMBL, Meyerhofstrasse 1, 69117 Heidelberg, Germany

(10) Phage selection of bicyclic peptides, binding to sphingolipids or regulators of sphingolipids homeostasis

Davide Bertoldo, Christian Heinis

¹*Laboratory of Therapeutic Proteins and Peptides, Institute of Chemical Sciences and Engineering, EPFL, CH-1015 Lausanne, Switzerland*

(11) Manipulation of intracellular ceramide flows and its impact on cell fate and organization

Amrita Jain¹, Katharina Ebell^{1,2}, Oliver Beutel², Jacob Piehler², Joost C.M. Holthuis¹

¹*Molecular Cell Biology Division,* ²*Biophysics Division, University of Osnabrück, Barbarastrasse 13, 49076 Osnabrück, Germany*

(12) Membrane lipid homeostasis: insights from a lipidomic screening of yeast kinase and phosphatase knockouts

Aline Santos, Fabrice David, Isabelle Riezman, Howard Riezman

Department of Biochemistry, Sciences II, University of Genève, CH-1211 Genève 4, Switzerland

(13) Mechanism and biological impact of ceramide trafficking at the ER-mitochondrial interface

Svenja Bockelmann¹, Katharina Ebell¹, Augustus Galih², Birol Cabukusta¹, Per Haberkant³, Sergey Korneev¹, John Mina¹, Joost C.M. Holthuis¹

¹*Molecular Cell Biology Division, University of Osnabrück, Barbarastrasse 13, 49076 Osnabrück, Germany;* ²*Structural and Computational Biology Unit, EMBL, Meyerhofstrasse 1, 69117 Heidelberg, Germany;* ³*Cell Biology and Biophysics Unit, EMBL, Meyerhofstrasse 1, 69117 Heidelberg, Germany*

(14) Cross-talk between signaling pathways and sphingolipid metabolism: looking for new players in Sphingolipid homeostasis

Auxiliadora Aguilera-Romero, Aline Xavier de Silveira dos Santos, Fabrice David, Isabelle Riezman, Manuele Piccolis, Robbie Loewith, Howard Riezman

Department of Biochemistry, Sciences II, University of Genève, CH-1211 Genève 4, Switzerland

(15) The ceramide synthase 2 null mouse

Oshrit Ben-David, Anthony H. Futerman

Department of Biological Chemistry, Weizmann Institute of Science, Rehovot 7632700, Israel

(16) Structure-function characterization of ceramide synthases

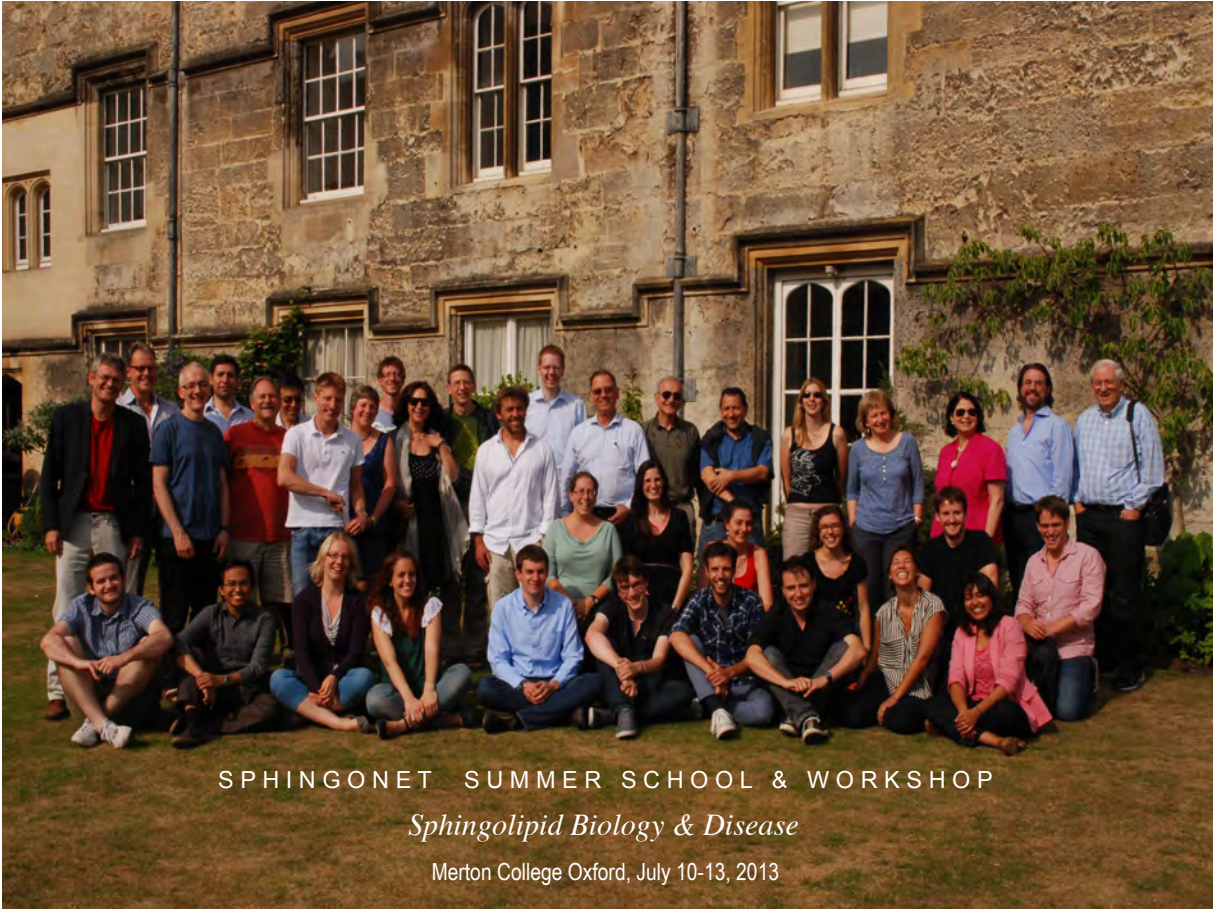
Rotem Tidhar, Anthony H. Futerman

Department of Biological Chemistry, Weizmann Institute of Science, Rehovot 7632700, Israel

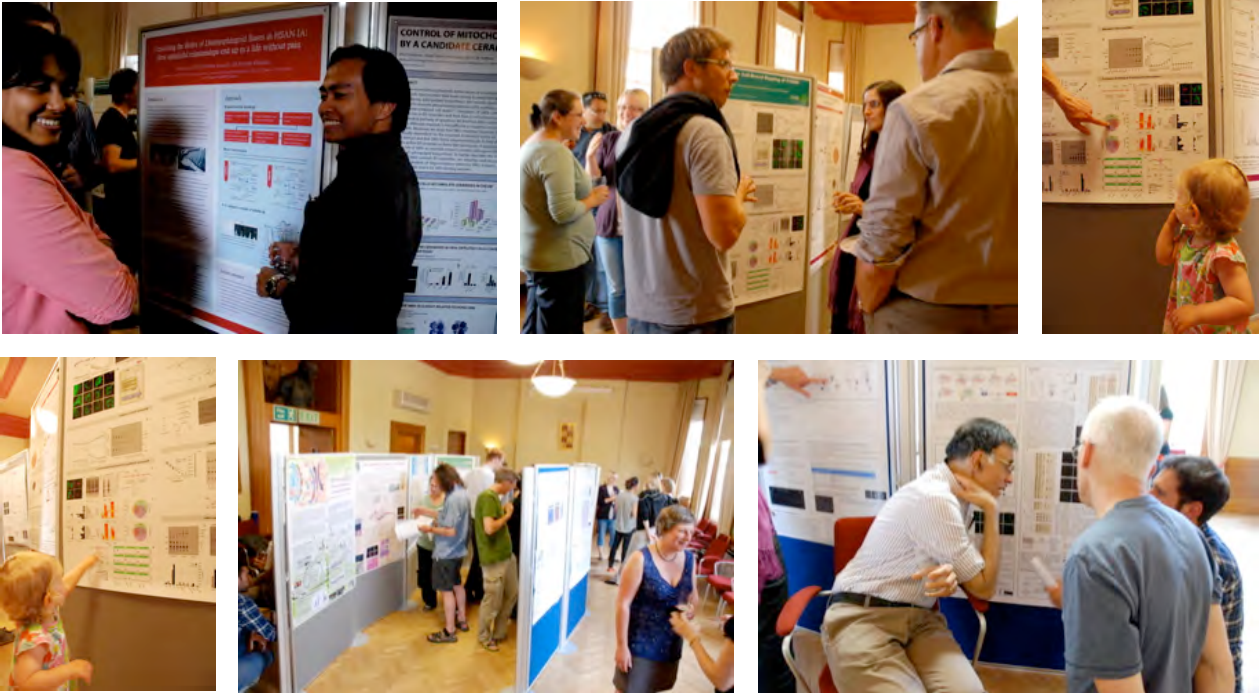
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IMPRESSIONS SPHINGONET SUMMER SCHOOL & WORKSHOP



Poster Sessions



Diner in Merton's beautiful Dining Hall

