THEO MURPHY INTERNATIONAL SCIENTIFIC MEETING ON
Structure and dynamics of the thylakoid membrane
Thursday 3 – Friday 4 May 2012
Organised by Professor James Barber FRS and Professor Peter Horton FRS

DAY 1: Thursday 3 May 2012

09.55 Welcome by Royal Society

SESSION 1: Structure, mechanisms and organisation of protein complexes in thylakoids

10.00 Photosystem II structure and function: successes and challenges
Professor James Barber FRS
10.30 Discussion
10.45 Coffee

11.15 Structure, function, evolution and utilization of photosystem I
Professor Nathan Nelson
11.45 Discussion
12.00 Lipid functions in cytochrome bc complexes; an odd event in evolution
Professor William A Cramer
12.30 Discussion
12.45 LUNCH

14.00 How ATP synthase works
Professor Sir John Walker FRS
14.30 Discussion
14.45 Lateral heterogeneity of complexes
Lateral heterogeneity and the chloroplast PSII damage and repair cycle
Professor Jan Anderson FRS and Professor Anastasios Melis
15.15 Discussion
15.30 Tea

16.00 Electron cryo-tomography of membrane protein complexes in mitochondria and chloroplasts
Professor Werner Kühlbrandt
16.30 Discussion
16.45 Structure of the dimeric RC-LH1 complex from Rhodobacca bororiensis studied by electron microscopy
Professor Egbert Boekema
17.15 Discussion
17.30 CLOSE
18.45 Pre-dinner drinks
19.00 DINNER

To celebrate the 80th Birthday of Professor Jan Anderson FRS

Dinner kindly supported by Agrisera

DAY 2: Friday 4 May 2012

SESSION 2: Dynamics of thylakoids: regulation, assembly and response to the environment

09.15 Optimisation of light harvesting and photoprotection - molecular mechanisms and physiological consequences
Professor Peter Horton FRS
09.45 Discussion
10.00 Role of protein kinases and phosphatases involved in the acclimation of the photosynthetic apparatus
Professor Jean-David Rochaix
10.30 Discussion
10.45 Coffee

11.15 Subunit organisation of the thylakoid protease involved in D1 degradation during Photosystem II repair
Professor Peter J Nixon
11.45 Discussion
12.00 How is Photosystem I protected against photodamage?
Professor Eva-Mari Aro
12.30 Discussion
12.45 LUNCH

SESSION 3: Responses to environmental changes

14.00 The regulatory factors for the biogenesis of thylakoid membrane protein complexes: diverse or conservative?
Professor Lixin Zhang
14.30 Discussion
14.45 The role of GOLDEN2-LIKE transcriptions factors in thylakoid assembly
Professor Jane Langdale
15.15 Discussion
15.30 Tea

16.00 Cellular redox homeostasis and its influence over photosynthetic gene expression
Professor Christine Foyer
16.30 Discussion
16.45 Acclimation of leaves to low light produces large grana: the origin of the predominant attractive force at work
Professor Fred Chow
17.15 Discussion
17.30 From ecophysiology to phenomics: some implications of photoprotection and shade-sun acclimation in-situ for dynamics of thylakoids in-vitro
Professor Barry Osmond FRS
18.00 Discussion
18.15 CLOSE