

ICAP2014

The 24th International Conference on Arginine and Pyrimidines

*Tsuzuki Lecture Theatre, Ruth Deech Building
St Anne's College, University of Oxford, Oxford, OX2 6HS*

DAY1, WEDNESDAY 16TH JULY 2014

10:30– 12:30 On-site Registration Tea, Coffee and Biscuits

Foyer B of Ruth Deech Building

12:30 – 14:00 Lunch

14:00 – 14:15 Welcoming Remarks

14:00 Welcome by Ji-Long Liu, Chair, ICAP2014 Organising Committee

14:15 – 17:15 Session 1: Pyrimidines (I) **Talk No**

Chair: Barbara Zimmermann

14:15 1A:

Elizabeth Carrey, University College London, UK

Early Steps in Pyrimidine Biosynthesis: Looking back, going forward **T01**

14:40 1B:

Barbara Zimmermann, Universidad de los Andes, Colombia

*Pyrimidine biosynthesis in *Toxoplasma gondii** **T02**

15:05 1C:

David Evans, Wayne State University, USA

Novel Peptide Inhibitors of Multifunctional Aspartate Transcarbamoylase **T03**

15:30-16:00 Tea, Coffee and Biscuits

16:00 1D:

Patricia Kuwabara, University of Bristol, UK

*Pyrimidines, metabolism and DNA repair in *C. elegans** **T04**

16:25 1E:

Lola Gonzalez, Instituto de Parasitología y Biomedicina, Spain

Role of dUTPase in the occurrence of uracil-containing DNA in Trypanosoma brucei **T05**

16:50 1F:

Torsten Möhlmann, University Kaiserslautern, Germany

Transport and catabolism of pyrimidine metabolites in plants **T06**

18:00 - Social activity / pub night (optional)

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DAY2, THURSDAY 17TH JULY 2014

8:00 – 9:00 Breakfast

**9:00 – 12:25 Session 2: Pyrimidines (II) – CTP Synthase and the
Cytoophidium** **Talk No**

Chair: Ömür Y. Tastan

9:00 2A:

Ömür Y. Tastan, University of Oxford, UK

Potential role for CTP synthase in Drosophila optic lobe development **T07**

9:25 2B:

Li-Mei Pai, Chang Gung University, Taiwan, ROC

Cbl regulates endoreplication by controlling cytoophidium **T08**

9:50 2C:

Gabriel Aughey

Determining the mechanisms of cytoophidium formation in Drosophila **T09**

10:15 2D:

Chia-Chun Chang, National Taiwan University, Taiwan, ROC

The Dynamics of Cytoophidium in Mammalian Cells **T10**

10:40– 11:10 Tea, Coffee and Biscuits

11:10 2E:

Gerson D. Keppeke,

CTPS inhibition induces formation of IMPDH2-based and CTPS1-based independent RR structures **T11**

11:35 2F:

Jun Yan, Chinese Academy Of Sciences, China

Purine metabolism, cell cycle and circadian clock **T12**

12:00 2G:

Lydia Hulme, University of Oxford, UK

CTP synthase and cytoophidium in S. pombe T13

12:30 – 14:00 Lunch

14:00 – 17:00 Session 3: Arginine and Urea Cycle (I) Talk No

Chair: Hiroki Morizono

14:00 3A:

Hiroki Morizono, Children's National Medical Center, USA

NAGS and its changing role through evolution T14

14:25 3B:

Vicente Rubio, Instituto de Biomedicina de Valencia, Spain

Nitrogen control beyond arginine biosynthesis: following the NAGK-PII-PipX-NtcA story in cyanobacteria T15

14:50 3C:

Paloma Liras Padin, University of León, Spain

ArgR, a versatil regulator affecting primary and secondary metabolism on Streptomyces coelicolor T16

15:15 3D:

Staffan Svärd, Uppsala University, Sweden

The role of arginine during infections by the intestinal parasite Giardia intestinalis T17

15:40-16:10 Tea, Coffee and Biscuits

16:10 3E

Daniel Charlier, Vrije Universiteit Brussel, Belgium

Regulation of the E. coli carAB operon by RutR and PepA T18

16:35 3F:

Peter Szlosarek, Barts Cancer Institute, Queen Mary University of London, UK

Targeting arginine in human cancers: from the lab to the clinic T19

17:00 - Evening free (No free dinner Served at St Anne's College)

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DAY3, FRIDAY 18TH JULY 2014

8:00 – 9:00 Breakfast

9:00 – 9:50 Session 4: Discussion - Does ICAP need a society?

Chair: Ji-Long Liu

9:50 – 12:25 Session 5: Arginine and Urea Cycle (II) **Talk No**

Chair: Lakshmi Kotra

9:50 4C:

Ljubica Caldovic, Children's National Medical Center, USA

The evolution of NAGS and urea cycle, NAGS deficiency in humans **T20**

10:15 4D:

Lakshmi Kotra, University of Toronto, Canada

Peptidyl arginine hypermodification and potential for the development of disease modifying agents **T21**

10:40– 11:10 Tea, Coffee and Biscuits

11:10 5A:

Richard Christopherson, University of Sydney, Australia

The mechanisms of action of purine analogues such as fludarabine on B-lymphoproliferative disorders **T22**

11:35 5B:

Andriy Sibirny, Institute of Cell Biology, NAS of Ukraine

Construction of the recombinant producers of bacterial arginine deiminase and human arginase and their use for arginine deprivation **T23**

12.00 5C:

Adrian Harris, University of Oxford, UK

CTP synthase 1 as a target for breast cancer therapy T24

12:30 – 14:00 Lunch

14:00 – 16:00 Oxford walking tour/Bus Tour (free of charge)

16:00-18.00 Tea, Coffee and Biscuits/ Discussion Session for future of ICAPs

17:00- 19:00 Session 6: Poster Session

19.00 Gala Dinner (free of charge)

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DAY4, SATURDAY 19TH JULY 2014

8:00 – 9:00 Breakfast

9:00 – 12:15 Session 7: Pyrimidines (III) Talk No

Chair: Santiago Ramón-Maiques

9:00 7A:

Santiago Ramón-Maiques, Spanish National Cancer Research Center (CNIO), Spain

Towards deciphering the architecture of CAD: structure of human ATCase and DHOase **T25**

9:25 7B:

Wolfgang Knecht, Lund University, Sweden

Deoxyribonucleoside kinases – biodiversity and practical use **T26**

9:50 7C:

Sergio de Cima, Instituto de Biomedicina de Valencia, Spain

Human carbamoyl phosphate synthetase: structure, function and pathology **T27**

10:15 7D:

Monika Loeffler, Philipps-University Marburg, Germany

Orotic acid: not merely an intermediate of pyrimidine synthesis **T28**

10:40-11:10 Tea, Coffee and Biscuits

11:10 7E:**Carmen Díez-Fernández, Instituto de Biomedicina de Valencia, Spain
Sergio de Cima***In vitro carbamoyl phosphate synthetase 1 (CPS1) expression deciphers CPS1 domain function and clarifies disease-causation in CPS1 deficiency* **T29****11:35 7F:****Zee-Fen Chang, National Yang-Ming University, Taiwan, ROC***Ribonucleotide reductase promotes genomic instability and tumor heterogeneity via increasing dUTP misincorporation* **T30****12:00 7G:****Aziz Aboobaker, University of Oxford, UK***Using flatworms as a model system for stem cell biology and regeneration* **T31****12.25 Closing remarks****Ji-Long Liu****12:30-14:00 Lunch**