

**COST Expert Meeting ‘Energy metabolism of parasitic protozoa as a drug target’  
and  
39th Microsymposium ‘Glycosomes, trypanosomatid metabolism and drug discovery’**

**Thursday 11 and Friday 12 October, 2007  
Michel de Visscher Auditorium  
ICP, Brussels**

**Thursday 11 October**

08.30-09.00 Welcome and coffee/tea

Morning session – chair: .....

09.00-09.10 Paul Michels (ICP, Brussels)

Introductory remarks

09.10-09.40 Vincent Pius Alibu (University of Glasgow)

African Sleeping Sickness: Development and *in vitro* evaluation of novel potential drugs

09.40-10.10 Emeric Miclet (Université Pierre et Marie Curie, Paris)

Three-dimensional structure and implications for the catalytic mechanism of 6-phosphogluconolactonase from *Trypanosoma brucei*

10.10-10.40 Stefania Hanau (University of Ferrara)

4-phospho-erythronate is an analogue of the transition-state of the dehydrogenation catalyzed by *T. brucei* 6-phosphogluconate dehydrogenase

10.40-11.05 Coffee/tea

11.05-11.35 Nathalie Galland (ICP, Brussels)

Characterization of PEX5 and PEX7, two receptors involved in the import of proteins into glycosomes of *T. brucei*

11.35-12.05 Emilie Verplaetse (ICP, Brussels)

Identification of a candidate for PEX13, a component of the docking complex involved in the biogenesis of glycosomes of *T. brucei*

12.05-12.20 Melisa Gualdron-Lopez (ICP, Brussels)

A preliminary study of the recycling of glycosomal matrix-protein receptor PEX5 in *Trypanosoma brucei*

12.20-13.45 Lunch in University Restaurant ‘Le Martin V’

Afternoon session – chair: .....

13.45-14.15 Julius Lukes, Shaojun Long, Milan Jirku (University of South Bohemia, Budejovice)

Iron-sulfur cluster assembly in *Trypanosoma brucei*

14.15-14.35 Zdenek Paris, Zdenek Verner, Hassan Hashimi and Julius Lukes (University of South Bohemia, Budejovice)

Respiratory complexes in procyclic *Trypanosoma brucei*: composition and function

14.35-15.05 Derek Nolan (Trinity College, Dublin)

Measuring the mitochondrial membrane potential in procyclic forms of *T. brucei*

15.05-15.35 Luis Rivas (Centro de Investigaciones Biologicas, Madrid)

Histatin and miltefosine: two different pathways to harass *Leishmania* mitochondria

15.35-16.00 Coffee/tea

16.00-16.30 Fred Opperdoes, Didier Vertommen (ICP, Brussels)

Differential expression of glycosomal and mitochondrial proteins in bloodstream-form and procyclic *T. brucei* as revealed by proteomics

16.30-17.00 Michael Boshart (University of Munich)

Redundant pathways for NADPH supply in glycosomes and mitochondria

17.00-17.30 Louis Tielens (Erasmus Medisch Centrum, Rotterdam)

Is the metabolism of trypanosomes related to the availability of substrates?

17.30- Drinks

19.30/20.00-...Dinner

## Friday 12 October

08.30-09.00 Coffee/tea

Morning session – chair: .....

09.00-09.30 Frédéric Bringaud (Université Victor Segalen, Bordeaux)

Proline metabolism of procyclic trypanosomes grown in glucose-rich and glucose-depleted conditions

09.30-10.00 Ilona Darlyuk (Technion, Israel Institute of Technology)

Regulation of arginine transport by the polyamine pathway and the cellular amino acids pool in *Leishmania*

10.00-10.30 Paul Michels, Mariana Igoillo-Esteve (ICP, Brussels)

ABC transporters in glycosomal membranes of *Trypanosoma brucei*

10.30-10.50 Daniel Rigden (University of Liverpool)

Fructose-1,6-bisphosphatase, a surprising yet promising drug target in *Leishmania*

10.50-11.10 Coffee/tea

11.10-11.40 Barbara Bakker (Vrije Universiteit Amsterdam)

Control and regulation of gene expression: quantitative analysis of the expression of phosphoglycerate kinase in bloodstream-form *Trypanosoma brucei*

11.40-12.10 Michael Ginger (University of Lancaster)

Two short stories relating to adenylate kinase function in trypanosomatids

12.10-12.40 Otávio Thiemann, A. Pimenta Jr., S. Sculaccio, E. Rodrigues, C. Oliveira, I. Torriani (Universidade de São Paulo)

Selenocysteine pathway in *L. major* and *T. brucei*: Solution structure of selenophosphate synthetase (SEL D) by Small Angle X-Ray Scattering

12.20-14.00 Lunch in University Restaurant ‘Le Martin V’

Afternoon session - chair: .....

14.00-14.30 Linda Gilmore (University of Edinburgh)

*Trypanosoma brucei* phosphofructokinase has a unique allosteric mechanism

- 14.30-15.00 Malcolm Walkinshaw (University of Edinburgh)  
*Leishmania mexicana* pyruvate kinase: structure of an enzyme-inhibitor complex and quantitative high-throughput screening of a compound library
- 15.00-15.30 Andrea Cavalli (University of Bologna)  
Metadynamics as a post-docking tool for computational drug design
- 15.30-16.00 Coffee/tea
- 16.00-16.30 Casimir Blonski (Université Paul Sabatier, Toulouse)  
Title to be announced
- 16.30-17.00 Paul Michels, Nadine Möbius, Wim Versees, Artur Cordeiro, Ana Caceres (ICP, Brussels)  
Glucokinase, hexokinase and a putative hexose-6-phosphate mutarotase in trypanosomatids
- 17.00 General discussion, closing remarks
- Drinks/dinner