Séminaire ibs

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Conférencier invité

Mercredi 06 Juin 2012

A 11h - Salle des séminaires de l'IBS

Par Daniel Picot

Institut de Biologie Physico-Chimique, Paris

The cytochrome b_6f complex of photosynthesis: where are the electrons ?

Respiration and photosynthesis generate trough their electron transfer chains an electrochemical proton gradient to drive ATP synthesis. Members of the cytochrome *b/* Rieske complex are present in these different energy transducing pathways by coupling electron transfer with proton translocation through the membrane. The most studied complexes from this family are the bc_1 complex from mitochondria and purple bacteria and the cytochrome b_6f in oxygenic photosynthesis. The tridimensional structures of these complexes are available. Their comparisons allow to grasp the adaptation to specific environment and their mechanisms. We are focusing our interest on the quinol reducing site of the b_6f complex, whose configuration deviates from a classical cytochrome. We are combining *in vivo* approaches with x-ray crystallography and try to alleviate the low resolution with the use of anomalous scattering.

Hôte : Eric Girard (IBS/ELMA)