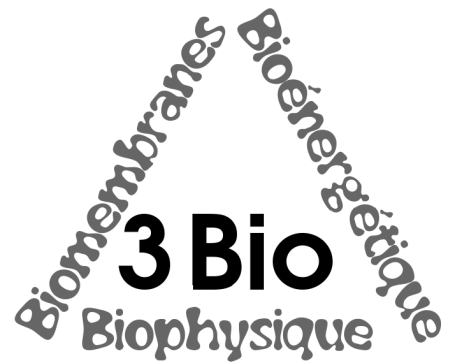


Séminaire du Service de Bioénergétique,
Biologie Structurale et Mécanismes
CEA/Saclay
IBITEC-S



<http://3bio.saclay.org>

lundi 13 février 2012 à 13h00, Bât. 532 P. 204

The dynamics of NADPH oxidase assembly and function on the phagosomal membrane

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Phagocytosis of pathogenic microorganisms is a key mechanism of the innate immune defence. The pathogens are internalized and destroyed by enzyme release into the phagosome and the phagosomal production of reactive oxygen species (ROS) by the NADPH oxidase. Cytosolic and membranous subunits of the oxidase assemble to form a functional enzyme. We use fast fluorescence video-microscopy and fluorescent protein-tagged oxidase subunits to investigate the signalling events that regulate oxidase assembly and ROS production. The cytosolic subunits appear to stay on the phagosome for different lengths. Anionic phospholipids in the phagosomal membrane emerge as a regulator of oxidase assembly and ROS production.

Tlili A et al. FRBM 2011 & JLeukBiol 2012

Invitation: Claire LEMAIRE

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