

**BELGIAN SOCIETY OF FUNDAMENTAL AND CLINICAL
PHYSIOLOGY AND PHARMACOLOGY**

Autumn Meeting
Saturday, November 8, 2008

UNIVERSITE CATHOLIQUE DE LOUVAIN
Faculté de Médecine
Auditoire Central D (Auditoire Maisin)
Avenue Emmanuel Mounier 51
1200 BRUXELLES-WOLUWE

Main lecture

- 10.00-10.45 Dr. R.A.J. CHALLISS
(Department of Cell Physiology and Pharmacology, University of Leicester,
United Kingdom):
- Allosteric modulators of G protein-coupled receptors and their therapeutic
potential.

Oral Communications

- 10.45-11.00 N. VANHOUTTE, J. ABARCA-QUINONES, B.F. JORDAN, J.M. MALOTEAUX,
E. HERMANS (UCLouvain):
Enhanced expression of the high affinity glutamate transporter GLT-1 in
glioma cells delays tumour progression in rats.
- 11.00-11.15 R. YANG¹, F. GEMBARDT², T. WALTHER^{2,3}, A. LUKASZUK⁴, D. TOURWÉ⁴,
P. VANDERHEYDEN¹, I. SMOLDERS¹, A. DUPONT¹ (VUBrussel^{1,4}, Charité
Berlin Germany², Univ. Hull UK³):
Pressor and renal effects of Angiotensine A.
- 11.15-11.30 E. MERCIER¹, M. MATHIEU², C. CLERCX¹, K. McENTEE^{1,2} (ULiège¹,
ULBruxelles²):
Influence of age on pulmonary arterial pressure in healthy beagle dogs.
- 11.30-11.45 N. MOURAD, M. NENQUIN, J.C. HENQUIN (UCLouvain):
Role of microtubules and microfilaments in metabolic amplification of insulin
secretion.
- 11.45-12.00 J.L. VAN HERCK¹, G.R.Y. DE MEYER², W. MARTINET², H. BULT²,
C.J. VRINTS¹, A.G. HERMAN² (Antwerp Univ. Hospital¹; UAntwerpen²):
Proteasome inhibition leads to smooth muscle cell death in advanced
atherosclerotic plaques of apolipoprotein E-deficient mice.

12.00-12.15 V. CROONS, W. MARTINET, A.G. HERMAN, J.-P. TIMMERMANS, G.R.Y. DE MEYER (UAntwerpen):
Anisomycin induces selective macrophage apoptosis in rabbit atherosclerotic plaques through activation of mitogen-activated protein kinase.

12.15-12.30 **Bulletin Session**
Oral presentation of Posters n° 1, 2, 7

12.30-14.00 **Lunch**
General Assembly
Poster presentations

Oral Communications

14.00-14.15 M. BENSELLAM, J.-C. JONAS (UCLouvain) (presented by E. HERMANS, UCLouvain):
Activation of Hypoxia Inducible Factors 1 and 2 by high glucose concentrations in cultured rat pancreatic beta-cells.

14.15-14.30 S. LEMAIRE¹, C. FUDA², F. VAN BAMBEKE¹, S. MOBASHERY², P.M. TULKENS¹ (UCLouvain¹, Univ. of Notre-Dame du Lac, Indiana USA) (presented by E. HERMANS, UCLouvain):
Is acidic pH a new weapon to fight the Methicillin-Resistant Staphylococcus Aureus (MRSA) superbug ? Role for Penicillin-Binding Protein 2a (PBP2a).

14.30-14.45 R. CLINCKERS¹, I. SMOLDERS¹, Y. MICHOTTE¹, G. EBINGER¹, M. DANHOF², R. VOSKUYL², O. DELLA PASQUA² (VUBrussel¹, Leiden NL.²):
Impact of efflux transporters and of seizures on the pharmacokinetics of oxcarbazepine metabolite in the rat brain.

14.45-15.00 G. RATH¹, J. SALIEZ¹, C. BOUZIN¹, P. GHISDAL¹, F. DESJARDINS¹, R. REZZANI², L.F. RODELLA², J. VRIENS³, B. NILIUS³, O. FERON¹, J.L. BALLIGAND¹, C. DESSY¹ (UCLouvain¹, Univ. Brescia It.², KULeuven³):
Role of caveolar compartmentation in EDHF-mediated relaxation: Ca²⁺ signaling and gap-junctions function are regulated by cav-1 in endothelial cells.

15.00-15.15 P. SONVEAUX^{1,2}, F. VEGRAN¹, B. GALLEZ¹, M.W. DEWHIRST², O. FERON¹ (UCLouvain¹, Duke University Medical School USA²):
Lactate-fueled tumor cell respiration: a new paradigm and a new therapeutic target.

- 15.15-15.30 P. LYBAERT (ULBruxelles):
K_{ATP} channels in human placenta, possible implication in hPL and hCG release ?
- 15.30-15.45 N. ZANOU, M. LOUIS, M. VAN SCHOOR, P. GAILLY (UCLouvain):
Calcium entry through TRPC1 channels induces calpain activation and controls myoblasts migration.

Coffee - Tea

Posters

(height 100 cm – width 100 cm)

1. H.A. NGUYEN¹, O. DENIS², A. VERGISON², P.M. TULKENS¹, M.J. STRUELENS², F. VAN BAMBEKE¹ (UCLouvain¹, ULBruxelles²) (presented by E. HERMANS, UCLouvain):
In vitro pharmacodynamic evaluation of intracellular activity of antibiotics (ABs) alone or in combination against a small colony variant (SCV) of *Staphylococcus aureus*.
2. M. FOCANT, S. GOURSAUD, J.M. MALOTEAUX, E. HERMANS (UCLouvain) :
Cultured astrocytes derived from corpus callosum or cortical grey matter show distinct glutamate handling properties.
3. S. GOURSAUD, J.M. MALOTEAUX, E. HERMANS (UCLouvain) :
Differential expression and regulation of high affinity glutamate transporters in astrocytes cultures derived from a rat model of amyotrophic lateral sclerosis.
4. B. MARQUEZ, C. VALLET, N.E. CACERES, M.P. MINGEOT-LECLERCQ, P.M. TULKENS, F. VAN BAMBEKE (UCLouvain) (presented by E. HERMANS, UCLouvain):
Active efflux of fluoroquinolone antibiotics from macrophages: from phenotype to genotype.
5. B. KOENER, M. VAN DE STADT, E. CONSTANT, J. MALOTEAUX, E. HERMANS (UCLouvain):
Optimisation of dopamine agonists and partial dopaminergic agonists induced-guanylyl nucleotide binding.
6. C. BOUCHERIE, E. HERMANS (UCLouvain) :
Adult mesenchymal stem cells prolong survival in a rat model of ALS by decreasing microglia activation.

7. J. VAN DEN EYNDEN, T. BALTHAZAR, D. JANSSEN, K. NELISSEN, I. SMOLDERS, J.M. RIGO (Univ. Hasselt):
Glycine modulates microglial activity by a glycine receptor independent mechanism.
8. A. BONAERT, N. CARON, A. LEGRAND (UMonsHainaut):
Contribution of the segmental reflexes to the distribution of EMG activity in the external intercostal muscles.
9. N. BAEYENS, G. VANDENBERG, N. MOREL (UCLouvain):
Extracellular calcium modulates the inhibitory effect of 4-aminopyridine on Kv channels in vascular smooth muscle cells.
10. A. MARTINSEN¹, C. BACCELLI¹, I. NAVARRO², A. ABAD², J. QUETIN-LECLERCQ¹, N. MOREL¹ (UCLouvain¹, Univ. Valencia, Spain²):
Vascular activity of a natural diterpene isolated from *Croton zambesicus* and of a structurally similar synthetic trachylobane.
11. T. ZGAVC, A-G. CEULEMANS, S. HACHIMI-IDRISSI, R. KOOIJMAN, S. SARRE, Y. MICHOTTE (VUBrussel) :
Post-ischemic mild hypothermia in the endothelin-1 rat model of focal cerebral ischemia: effect of delayed treatment.
12. A-G. CEULEMANS, T. ZGAVC, R. KOOIJMAN, S. HACHIMI-IDRISSI, S. SARRE, Y. MICHOTTE (VUBrussel):
Effect of post-ischemic and mild hypothermia on cytokines in the endothelin-1 rat model for focal cerebral ischemia.
13. M. BOL, B. VANHEEL (UGent):
Influence of methanandamide and CGRP on whole cell K⁺ currents in acutely isolated mesenteric artery smooth muscle cells.
14. V. GURNE, V. BRUWIER, M. DAIX, L. WIGGERS, N. KIRSCHVINK (FUNDPNamur):
Effects of supplements extracts on cell proliferation in equine chondrocytes and tendinous fibroblasts in vitro.
15. M. DAIX, L. WIGGERS, S. SCHULSSE, M. RAES, N. KIRSCHVINK (FUNDPNamur):
Effects of oral supplementation with glucosamine and chondroitin sulphate on F-2-Isoprostane concentration and enzymatic balance in IL-1-beta stimulated-chondrocytes.
16. S. SCHULSSE, L. WIGGERS, M. DAIX, N. KIRSCHVINK (FUNDPNamur):
Effects of oral supplementation with glucosamine and chondroitin sulphate on MMP-2 activity in supernatant of IL-1-beta stimulated-chondrocytes.

17. M. VAN MOORHEM¹, E. DECROCK¹, E. COUSSEE², L. FAES², E. DE VUYST¹, K. VRANCKX¹, M. DE BOCK¹, N. WANG¹, F. LAMBEIN³, G. CALLEWAERT², L. LEYBAERT¹ (UGent^{1,3}, KULeuven²):
Beta-ODAP-triggered mitochondrial calcium overload as an early event in excitotoxicity.
18. M. DE BOCK¹, E. DE VUYST¹, N. WANG¹, M. CULOT², M. VAN MOORHEM¹, E. DECROCK¹, R. CECHELLI², L. LEYBAERT¹ (UGent¹, Univ. D'Artois Lens Fr.²):
Calcium oscillations/waves in blood-brain barrier endothelial cells and their role in blood-brain barrier permeability.
19. N. WANG, E. DE VUYST, M. DE BOCK, E. DECROCK, M. VAN MOORHEM, L. LEYBAERT (UGent):
Inhibition of Cx43 hemichannel responses with high $[Ca^{2+}]_i$ is mediated by mechanisms different from calcium activation of hemichannel responses.
20. E. DE VUYST, E. DECROCK, M. DE BOCK, N. WANG, M. VAN MOORHEM, L. LEYBAERT (UGent):
 Ca^{2+} regulation of Cx43 hemichannel mediated ATP release.
21. A. BAGUET, A. POTTIER, I. EVERAERT, S. CALLENS, H. REYNGOUDT, E. ACHTEN, W. DERAIVE (UGent) (presented by J.L. PANNIER, UGent):
Carnosine loading and unloading in human skeletal muscle.
22. W. DERAIVE, A. BAGUET, A. POTTIER, J. BOUCKAERT, K. KOPPO (UGent) (presented by J.L. PANNIER, UGent):
Beta-alanine supplementation reduces acidosis during high-intensity cycling, but has no effect on ventilation or oxygen uptake.
