

**BELGISCH GENOOTSCHAP VOOR FUNDAMENTELE
EN KLINISCHE FYSIOLOGIE EN FARMACOLOGIE (v.z.w.d.)**

**SOCIETE BELGE DE PHYSIOLOGIE DE PHYSIOLOGIE
ET DE PHARMACOLOGIE FONDAMENTALES ET CLINIQUES (a.s.b.l.)**

Vergadering van zaterdag 17 november 2007

Réunion du samedi 17 novembre 2007

KATHOLIEKE UNIVERSITEIT LEUVEN

Faculteit Geneeskunde

Campus Gasthuisberg

Onderwijs & Navorsing 2

auditoria BMW2 & BMW4

Herestraat 49

3000 LEUVEN

09.30-10.00 **Onhaal - Accueil**

Fundamentele Fysiologie en Farmacologie / Physiologie et Pharmacologie Fondamentales
audit. BMW2

Gastlezing – Rapport invité

10.00-10.45 Prof. S.P. SRINIVAS, Ph.D. (Indiana Univ. Bloomington, USA)

Physiology of the corneal endothelium: regulation of actin cytoskeleton.

Mededelingen – Communications

10.45-11.00 G. BULTYNCK¹, A. SAXENA², J.-P. DECUYPERE¹, L. MISSIAEN¹,
J.B. PARYS¹, H. DE SMEDT¹, A. METHNER² (¹KULeuven, ²Heinrich
Heine Univ. Düsseldorf, Germany).
Bax inhibitor-1 regulates Ca²⁺ flux from the ER through IP₃R₁.

11.00-11.15 E. DE VUYST, M. DE BOCK, E. DECROCK, M. VAN MOORHEM,
L. LEYBAERT (UGent).
Connexin-43 hemichannel regulation by intracellular calcium:
involvement of different signalling pathways.

11.15-11.30 E. SAMMELS, B. DEVOGELAERE, L. MISSIAEN, J.B. PARYS,
H. DE SMEDT (KULeuven).
Molecular and functional analysis of the interaction between poly-
cystin-2 and the inositol 1,4,5-trisphosphate receptor.

- 11.30-11.45 V. VANDERHEYDEN^{1,2}, S.-Y. YOUNG², J. ITO², T. WAKAI², H. DE SMEDT¹, J.B. PARYS¹, R.A. FISSORE² (KULeuven¹, Univ. Massachusetts USA²).
M-phase kinases phosphorylate the type 1 inositol 1,4,5-trisphosphate receptor (IP₃R1).
- 11.45-12.00 B. LUBAMBA, J. LEBACQ, P. LEBECQUE, P. WALLEMACQ, T. LEAL (UCLouvain).
Correcting effect of phosphodiesterase 5 inhibitors on chloride transport in cystic fibrosis.
- 12.00-12.15 R. CLINCKERS, I. SMOLDERS, T. ZGAVC, A. MEURS, J. PORTELLI, G. EBINGER, Y. MICHOTTE (VUBrussel).
Complete characterisation of the involvement of hippocampal noradrenergicreceptor subtypes in the modulation of acute seizures.
- 12.15-12.30 BULLET SESSION
Mondelinge voorstelling van de posters 1 t/m 5
Présentation orale des posters 1 à 5

Klinische Farmacologie / Pharmacologie Clinique
audit. BMW4

- 10.00–10.15 I. BAMBUST¹, F. VAN AELST², E. JOOSENS³, D. SCHALLIER⁴, H. REZAEI KALANTARI⁵, R. PAULUS⁵, V. RENARD¹, M. CLAUSSE⁶, L. DUCK⁷, S. LUCE⁸, P. PIERRE⁹, S. VAN BELLE¹, S. ROTTEY¹ (¹UGent, ²H.-Hartziekenhuis Roeselare-Menen, ³ZNA-Middelheim Antwerpen, ⁴VUBrussel, ⁵CH Peltzer-Tourelle Verviers, ⁶Clin. Saint-Luc Bouge, ⁷Clin. Saint-Pierre Ottignies, ⁸Hôp. Erasme Brussels, ⁹Clin. Saint-Joseph Arlon).
A Belgian registry of interleukin-2 administration for treatment of metastatic renal cell cancer.
- 10.15–10.30 A. ROGIERS, B.J. VAN DER SCHUEREN, J.N. DE HOON (KULeuven).
Assessment of the effect of aprepitant on the increase in dermal blood flow in response to topically applied capsaicin.
- 10.30–10.45 F.H. VANMOLKOT, J.N. DE HOON (KULeuven).
Endothelial function of forearm resistance vessels in migraine: a cross-sectional study.
- 10.45–11.00 K. ALLEGAERT, R. VERBESSELT, A. DEBEER, G. NAULAERS, J. DE HOON (KULeuven).
Interindividual variability of phenotypic O-demethylation activity in the first months of life: ontogeny and CYP2D6 polymorphism.

11.00-11.15 J. DE GRÈVE, L. DE COSTER, I. UMELO, J SADONES, C. GANG, P. IN 'T VELD, E. TEUGELS, B. NEYNS, A.G. DUPONT (V.U.Brussel).
The necessity of enriching patient populations for targeted cancer therapies, exemplified by lung cancer and colorectal cancer.

11.15–12.15 BULLET SESSION
Mondelinge voorstelling van de posters 29 t/m 40
Présentation orale des posters 29 t/m 40

12.15–12.30 A.G. DUPONT¹, P.B. VAN WILDER² (¹VUBrussel, ²RIZIV).
Access to orphan drugs in Belgium: quality of clinical evidence.

audit. BMW2 **Algemene lezing – Rapport Général**

12.30-12.45 T. GODFRAIND¹, E. LACROIX² (¹UCLouvain, ²UGent),
60 ans Société Belge de Physiologie et de Pharmacologie
60 jaar Belgisch Genootschap voor Fysiologie en Farmacologie

12.45-14.00 **Lunch**
Bezoek aan de posters / visite aux posters

Algemene Vergadering – Assemblée générale (audit. BMW2)

Fundamentele Fysiologie en Farmacologie / Physiologie et Pharmacologie Fondamentales
audit. BMW2

14.00-14.15 S. SOYFOO, P. LYBAERT, N. BULUR, K. LOUCHAMI, R. CRUTZEN, Y. ZHANG, E. HUPKENS, J. PERRET, W. MALAISSE, A. SENER, R. BEAUWENS (ULBruxelles).
Expression of electrogenic NaHCO_3 -cotransport NBCe1 in beta cells.

14.15-14.30 V. CROONS, W. MARTINET, A. HERMAN, G.R.Y. DE MEYER (UAntwerpen).
The protein synthesis inhibitors puromycin and cycloheximide have differential effects on vascular smooth muscle cell viability.

14.30-14.45 S. NIMMEGEERS¹, K. DECALUWE¹, P. SIPS², E. BUYS², P. BROUCKAERT², J. VAN DE VOORDE (¹UGent, ²VIB & UGent).
Role of the soluble guanylyl cyclase α_1 subunit in mice corpus cavernosum smooth muscle relaxation.

- 14.45-15.00 O. DE BACKER¹, E. ELINCK¹, P. SIPS², E. BUYS², P. BROUCKAERT¹, R.A. LEFEBVRE¹ (¹ UGent, ² VIB & UGent).
Role of soluble guanylate cyclase alfa1 in the relaxant effect of carbon monoxide-releasing molecule-2 in murine gastric fundus.
- 15.00-15.15 I. DHAESE¹, G. VANNESTE¹, R. THOONEN², P. BROUCKAERT², R.A. LEFEBVRE¹ (¹ UGent, ² VIB & UGent).
Gastric nitreergic relaxation, gastric emptying and intestinal transit in soluble guanylate cyclase beta1 His105Phe mutant mice.
- 15.15-15.30 E. VAN VRE, H. BULT, V. HOYMANS, C. VRINTS, J. BOSMANS (UAntwerpen).
Dendritic cells and atherosclerosis: a links with CRP?
- 15.30-16.30 **Bezoek aan de posters / visite aux posters**

Posters

Afmetingen / Dimensions

Hoogte/hauteur 150 cm – largeur/breedte 90 cm)

1. A. SCHALLIER¹, A. MASSIE¹, D. VAN DAM¹, P.P. DE DEYN², Y. MICHOTTE¹, I. SMOLDERS¹ (¹ VUBrussel, ² UAntwerpen).
The role of glutamate transporters in Alzheimer APP23 transgenic mice.
2. R. YANG, I. SMOLDERS, P. VANDERHEYDEN, T. WALTHER, A. DUPONT (VUBrussel).
Renal vasoconstrictor and pressure responses to angiotensin peptides in AT2 receptor knock out versus wild type mice.
3. A. ABOU-LOVERGNE, O. KOUKOU, M. HILLY, S. PRIGENT, F.P. MONNET, L. COMBETTES (Inserm UMR-S U757, Univ. Paris-Sud, Orsay Fr.) (presented by L. LEYBAERT, UGent).
Sigma-1 receptor does not affect InsP₃ induced Ca²⁺ signals in hepatocytes.
4. E. GONZALES^{1,2}, S. PRIGENT¹, A. ABOU-LOVERGNE¹, S. BOUCHERIE¹, T. TORDJMANN¹, E. JACQUEMIN², L. COMBETTES¹ (¹Inserm UMR-S U757, Univ. Paris-Sud, Orsay Fr., ² Hôpitaux de Paris, le Kremlin Bicêtre Fr.). (presented by L. LEYBAERT, UGent).
P2X receptors in hepatocytes: actors of the purinergic signalling.
5. S. BOUCHERIE, L. COMBETTES (Inserm UMR-S U757, Univ. Paris-Sud, Orsay Fr.) (presented by L. LEYBAERT, UGent).
Cholestatic bile acids inhibit hepatocyte gap junction permeability: in search of a mechanism.

6. M. DE BOCK, E. DE VUYST, E. DECROCK, M. VAN MOORHEM, L. LEYBAERT (UGent).
Connexin hemichannels and calcium signaling between blood-brain barrier endothelial cells.
7. E. DECROCK, M. VAN MOORHEM, M. DE BOCK, E. DE VUYST, K. D'HERDE, L. LEYBAERT (UGent). Connexin channels mediate propagation of apoptosis in a glioma cell model.
8. M. VAN MOORHEM¹, E. DECROCK¹, E. COUSSEE², E. PILLE², F. LAMBEIN³, H. DE SMEDT², P. VANGHELUWE², F. WUYTACK², P. DE SMET⁴, G. CALLEWAERT¹, L. LEYBAERT¹ (¹UGent, ²K.U.Leuven, ³IPBO-Gent, ⁴KULAKortrijk).
Beta-ODAP toxicity may be related to a disturbance of the cellular Ca²⁺ handling.
9. J. LEEMANS¹, C. CAMBIER¹, N. KIRSCHVINK², C. CLERCX¹, P. GUSTIN¹ (¹ULiège, ²FUNDPNamur).
Concentrations of leukotriene B4 in bronchoalveolar lavage fluid of cats with *Ascaris suum* induced asthma.
10. A. GWANYANYA, J. VEREECKE, K. MUBAGWA (KULeuven).
N-(p-amylocinnamoyl)anthranilic acid (ACA)-induced cation current in ventricular cardiac myocytes.
11. S.M.A PASCAL¹, S. PELENGARIS², M. KHAN², J.C. JONAS¹ (¹UCLouvain, ²Univ. Warwick-UK).
Effects of controlled c-MYC activation on mouse pancreatic β -cell survival and function.
12. I. VANDECAETSBECK, F. WUYTACK, L. RAEYMAEKERS, M. SCHUERMANS, P. VANGHELUWE (KULeuven).
Exploring the structural basis underlying the high affinity of SERCA2b for cytosolic Ca²⁺.
13. M.R. SEPULVEDA¹, D. MARCOS², M. BERROCAL², L. RAEYMAEKERS¹, A.M. MATA², F. WUYTACK¹ (¹KULeuven, ²Univ. Extremadura, Badajoz, Spain)
Distribution and activity pattern of the secretory pathway Ca²⁺-ATPase isoform 1 (SPCA1) in the brain of mice during post-natal development.
14. J. VANOEVELEN, B. DE CAT, M. SCHUERMANS, L. MISSIAEN, L. RAEYMAEKERS, G. DAVID, F. WUYTACK (KULeuven).
The zebrafish secretory pathway Ca²⁺-ATPase is a functional Ca²⁺/Mn²⁺ pump essential for embryonic development

15. F. PITTOORS, P.P. VAN BOGAERT (UAntwerpen).
Mode of action of bradycardic agents on HCN channels: a mathematical model.
16. R. PONSARTS¹, C. D'HONDT¹, S.P. SRINIVAS², J. VEREECKE¹,
B. HIMPENS¹ (¹KULeuven, ²Indiana Univ. Bloomington, USA).
Myosin II ATPase activity is involved in the thrombin-induced inhibition of
gap junctional and paracrine intercellular communication in bovine corneal
endothelial cells.
17. C. D'HONDT¹, R. PONSARTS¹, S.P. SRINIVAS², J. VEREECKE¹,
B. HIMPENS¹ (¹KULeuven, ²Indiana Univ. Bloomington, USA).
Histamin inhibits intercellular calcium wave propagation in corneal endothelial cells.
18. P. LYBAERT, A. DANGUY, F. LELEUX, S. MEURIS, P. LEBRUN (ULBruxelles).
Acrosome detection and reaction to calcium ionophore challenge in mouse
spermatozoa: methodological considerations.
19. Y. ZHANG, E. HUPKENS, K. LOUCHAMI, Y.A. CARPENTIER, W.J. MALAISSE,
A. HERCHUELZ, A. SENER (ULBruxelles).
Increased $[Ca^{2+}]_i$ and secretory responses to carbamylcholin in pancreatic islet cells
in long-chain omega-3 fatty acid-depleted rats.
20. W.J. MALAISSE, K. LOUCHAMI, Y. ZHANG, E. HUPKENS, Y.A. CARPENTIER,
A. HERCHUELZ, A. SENER (ULBruxelles): Impaired $[Ca^{2+}]_i$ and secretory responses
to ouabain in pancreatic islet cells from rats depleted in long-chain polyunsaturated
omega-3 fatty acids.
21. M. LOUIS, N. ZANOU, P. GAILLY (UCLouvain):
TRPC1 regulates skeletal myoblasts migration and differentiation.
22. M. AHARIZ¹, H. DEWEVRE², J.-P. PERRAUDIN³, Ph. COURTOIS^{1,2} (ULBruxelles¹,
HEFF², Biopole³). *Candida albicans* inhibition by thiocyanate – H₂O₂ – peroxidase
system in oral gel.
23. W.H. ZHANG², L. FIEVEZ¹, E. CHEU¹, J. STEUVE¹, P. DORTU¹, Y. ZHANG²,
W.F. RONG², F. BUREAU¹, P. GUSTIN¹ (¹ULiège, ²SJTU):
Effects of formoterol on MMP-2 and MMP-9 activity in bronchoalveolar lavage fluid in
rats with cadmium-induced acute pulmonary inflammation.
24. J. STEUVE¹, E. CHEU¹, W. ZHANG², P. DORTU¹, F. BUREAU¹, P. GUSTIN¹
(¹ULiège, ²SJTU).
Influence of different exposure conditions to cigarette smoke on the pulmonary acute
inflammatory response in mice

25. E. CHEU¹, J. STEUVE¹, I. FIEVEZ¹, W. ZHANG², P. DORTU¹, F. BUREAU¹, P. GUSTIN¹, (¹ULiège, ²SJTU).
Investigation of pulmonary expression of heat shock protein HSP70 in mice chronically exposed to cigarette smoke.
26. S. NIMMEGEERS¹, K. DE CALUWE¹, R. THOONEN², P. BROUCKAERT², J. VAN DE VOORDE¹ (¹UGent, ²VIB & UGent).
Vascular smooth muscle relaxation in soluble guanylyl cyclase β_1 his105phe mutant mice.
27. N. MAENHAUT, K. BOUSSERY, C. DELAEY, J. VAN DE VOORDE (UGent).
Adenosine enhances the relaxing influence of rat and bovine retinal tissue.
28. A.-E. DECLEVES¹, D. NONCLERCQ², N. BOUBY³, N. CARON¹ (¹FUNDPNamur, ²UMons-Hainaut, ³INSERM U652-Paris Fr.).
Intrarenal distribution and effects of urotensin-II-system in rats with chronic renal failure.
- 28^{bis} N. MARKADIEU¹, H. GAEGGELER², R. CRUTZEN¹, B. ROSSIER², C. ERNEUX³, R. BEAUWENS¹ (¹ULBruxelles, ²Univ. Lausanne-Suisse, ³IRIBHM-ULBruxelles).
Sodium transport across monolayers of murine cortical collecting duct (mCCD) cells.
29. B.J. VAN DER SCHUEREN¹, M.W. LUNNON², B. LAURIJSSSENS³, F. GUILLARD⁴, J. PALMER², M. DEPRÉ¹, A. VAN HECKEN¹, F.H. VANMOLKOT¹, J.N. DE HOON¹ (¹KULeuven, ²Discovery Medicine, GSK, Harlow, UK, ³Clinical Pharmacokinetics, Modeling and Simulation, GSK, Greenford, UK, ⁴Statistics & Programming, GSK, Harlow, UK).
Selective iNOS inhibition in acute migraine: pharmacokinetic characteristics of GW273629 in and out of a migraine attack.
30. M. DEPRÉ¹, J.N. DE HOON¹, I. DE LEPELEIRE², B.J. VAN DER SCHUEREN¹, A. VAN HECKEN¹, J.E. BOYLE³, S.A. KANE³, R. BLANCHARD³, K. WILLSON³, Y. XU³, N. AGRAWAL³, M.G. MURPHY³, J. PALCZA³, A. XIAO³, S.R. SINCLAIR³ (¹KULeuven, ²Merck Res. Labs, MSD (Europe) Inc., Brussels, ³Merck Res. Labs, Upper Gwynedd & West Point, PA USA).
MK-0974, a novel oral CGRP antagonist, exhibits similar pharmacokinetics during and between migraine attacks.
31. A. SOMERS, M. PETROVIC, H. ROBAYS, L. VAN BORTEL (UGent).
Clinical pharmacy activities at a geriatric ward: a pilot project.
32. A. SOMERS, M. PETROVIC, H. ROBAYS, M. BOGAERT, L. VAN BORTEL (UGent).
Drug related problems leading to hospitalisation of geriatric patients.

33. L. OUTTIER, P. DE PAEPE, M. PETROVIC, W. BUYLAERT (UGent).
Drug interactions and adverse drug reactions in the elderly admitted to the emergency department of Ghent University Hospital.
34. T. DE BACKER¹, R. VANDER STICHELE¹, P. LEHERT², L. VAN BORTEL¹ (¹UGent, ²FUCAM, University of Mons, Belgium).
Naftidrofuryl for intermittent claudication. An IPD meta-analysis.
35. F. DE BOECK⁴, J. ROMANO¹, B. VARIANO², P. COPLAN*¹, J. VAN ROEY², K. DOUVILLE¹, Z. ROSENBERG¹, M. TEMMERMAN⁴, S. WEYERS⁴, M. MITCHNICK¹, L.M. VAN BORTEL⁴. (¹International Partnership for Microbicides, Silver Springs, MD, USA, ²Population Council, New York, USA, ³Tibotec, Mechelen, Belgium, ⁴UGent, *currently with Wyeth Pharmaceuticals).
Sustained delivery of microbicide Dapivirine using intra-vaginal rings: an independent clinical assessment of safety and drug delivery in women.
36. F. DE BOECK, T. CHRISTIAENS, L. DE BOLLE, E. MEHUYS, I. VAN TONGELEN, E. ADRIAENS, J.P. REMON, L.M. VAN BORTEL (UGent).
Parvalbumin plays an essential role in the hypercalciuria induced by loop diuretics.
37. R. VANDER STICHELE¹, R. VAN TIELEN² (¹UGent, ²Belgian Pharmaceutical Industry Association, Brussels).
Fifteen years of pharmaceutical expenditures in Belgium from 1990 to 2004.
38. R. VANDER STICHELE (UGent).
Surveillance of Antibiotic use in Western European countries and quality indicators.
39. P. DUPREZ¹, R. VANDER STICHELE², T. CHRISTIAENS² (¹Université de Nice, France, ²UGent).
The BEERS criteria for potentially inappropriate geriatric Medication Use: improving the validity of international comparisons by linking to international medication classifications.
40. J. SADONES, A. MICHOTTE, P. IN 'T VELD, C. CHASKIS, R. SCIOT, J. MENTEN, E. JOOSSENS, T. STRAUVEN, L. D'HONDT, D. SARTENAER, S. CALIFICE, K. BIERAU, C. SVENSSON, J. DE GRÈVE, B. NEYNS (VUBrussel).
MGMT promoter hypermethylation predicts sensitivity to Temozolomide in patients with recurrent glioma.

Coffee – Tea