

**PUBLICATIONS OF THE UNIVERSITY
RESEARCH GROUPS**

**prof. dr. C. Ampe, prof. dr. L. Arckens,
prof. dr. E. De Schutter, prof. dr. A. Goffinet,
prof. dr. L. Leybaert, prof. dr. P. Maquet,
prof. dr. S.N. Schiffmann,
prof. dr. P. Vanderhaeghen**

SUPPORTED BY GRANTS FROM THE

**QUEEN ELISABETH MEDICAL
FOUNDATION**

2005

VOLUME I

Prof. Dr. Christophe Ampe

A. SHARMA, A. LAMBRECHTS, L. THI. HAO, THANH T. LE, C.A. SEWRY, A. H.M. BURGHEES, G.E. MORRIS and C. AMPE.

A role for complexes of survival of motor neurons (SMN) protein with gamins and profiling in neurite-like cytoplasmic extensions of cultured nerve cells.

Experimental Cell Research, Vol. nr. 309, pp. 185-197. **Impact Factor:**

Prof. Dr. Lutgarde Arckens

E. VAN DER GUCHT, S. CLERENS, S. JACOBS and L. ARCKENS;

Light-induced Fos expression in phosphate-activated glutaminase- and neurofilament protein-immunoreactive neurons in cat primary visual cortex.

Brain Research, Vol. 1035, pp.60-66. **Impact Factor: 2,296.**

Prof. Dr. Erik De Schutter

K. TAHON, A. VOLNY-LURAGHI and E. DE SCHUTTER.

Temporal characteristics of tactile stimuli influence the response profile of cerebellar Golgi cells.

Neuroscience Letters, Vol. 390, pp. 156-161. **Impact Factor: 1,898.**

Prof. Dr. A. Goffinet

F. TISSIR, I. BAR, Y. JOSSIN and A. M. GOFFINET.

Protocadherin Celsr3 is crucial in axonal tract development.

Nature Neuroscience, Vol. 8, Nr. 4, pp. 451-457. **Impact Factor :**

A. CARIBONI, S. RAKIC, A. LIAPA, R. MAGGI, A. GOFFINET and J. G.J. PARNAVELAS.
Reelin provides an inhibitory signal in the migration of gonadotropin-releasing hormone neurons.

Development, Vol. 132, pp. 4709-4718, **Impact Factor:**

Prof. Dr. Luc Leybaert

E. DE VUYST, E.DECROCK, L. CABOOTER, G.R. DUBYAK, C.C. NAUS, W. HOWARD EVANS and L. LEYBAERT.

Intracellular calcium changes trigger connexion 32 hemichannel opening.

The EMBO Journal, Vol. nr 25, pp. 34-44. **Impact factor: 10,492.**

A. DE MEYER, C. MABILDE, M.J. SANDERSON and L. LEYBAERT.

A simple and practical method to acquire geometrically correct images with resonant scanning-based line scanning in a custom-built video-rate laser scanning microscope.

Journal of Microscopy, Vol. nr 219, pp. 133-140. **Impact Factor: 1,739.**

LUC LEYBAERT

Neurobarrier coupling in the brain: a partner of neurovascular and neurometabolic coupling ?

Journal of central Blood Flow and Metabolism, Vol nr. 25, pp. 2-16. **Impact Factor: 5,370.**

Prof. Dr. Pierre Maquet

E. SALMON, S. LESPAIGNARD, P. MARIQUE, F. PEETERS, K. HERHOLZ, D. PERANI, V. HOLTHOFF, E. KALBE, D. ANCHISI, S. ADAM, E. COLETTE and G. GARRAUX.

Cerebral metabolic correlates of four dementia scales in Alzheimer's disease.

Journal of Neurology. Pp. 1-8. **Impact Factor: 2,844.**

F. PERRIN, P. MAQUET, P. PEIGNEUX, P. RUBY, C. DEGUELDRE, E. BALTEAU, G. DEL FIORI, G. MOONEN, A. LUXEN and S. LAUREYS.

Neural mechanisms involved in the detection of our first name: a combined ERPs and PET study.

Neuropsychologia, Vol. 43, pp. 12-19. **Impact Factor: 4,119.**

T. THANH DANG-VU, M. DESSEILLES, S. LAUREYS, C. DEGUELDRE, F. PERRIN, C. PHILIPS, P. PEIGNEUX and P. MAQUET.

Cerebral correlates of delta waves during non-REM sleep revisited.

NeuroImage, Vol. 28, pp. 14-21. **Impact Factor: 5,288.**

F. COLLETTE, L. OLIVIER, M. VAN DER LINDEN, S. LAUREYS, G. DELFIORE, A. LUXEN and E. SALMAON.

Involvement of both prefrontal and inferior parietal cortex in dual-task performance.

Cognitive Brain Research, Vol. 24, pp. 267-251. **Impact Factor: 2,471.**

M. BOLY, M-E. FAYMONVILLE, P. PEIGNEUX, B. LAMBERMONT, F. DAMAS, A. LUXEN, M. LAMY, G. MOONEN, S. LAUREYS and P. MAQUET.

Cerebral processing of auditory and noxious stimuli in severely brain injured patients : Differences between VS and MCS.

Neuropsychological Rehabilitation, Vol. 15, pp. 283-289. **Impact Factor: 1,212.**

T.T. DANG-VU, M. DESSEILLES, G. ALBOUY, A. DARSAUD, S. GALS, G. RAUCHS, M. SCHABUS, V. STERPENICH, G. VANDEWALLE, S. SCHWARTZ and P. MAQUET.

Dreaming: a neuroimaging view.

Schweizer archive für Neurologie und Psychiatrie, Vol. 156, pp. 415-425.

Prof. Dr. S.N. Schiffmann

K. BANTUBUNGI, C. JACQUARD, A. GRECO, A. PINTOR, A. CHTARTO, K. TAI, M-C.GALAS, L. TENENBAUM, N. DÉGLON, P. POPOLI, L. MINGHETTI, E. BROUILLRT, J. BROTTCHI, M. LEVIVIER, S.N. SCHIFFMANN and D. BLUM.

Minocycline in phenotypic models of Huntington's disease.

Neurobiology of Disease, Vol. 18, pp. 206-217. **Impact Factor: 4,782.**

B. BEARZATO, L. SERVAIS, G. CHERON and S.N. SCHIFFMANN.

Age dependence of strain determinant on mice motor coordination.

Brain Research, Vol. 1039, pp. 37-42. **Impact Factor: 2,302.**

S. BELLIER, N.R. DA SILVA, G. AUBIN-HOUZELSTEIN, C. ELBAZ, J.-M. VANDERWINDEN and J.J. PANTHIER.

Accelerated intestinal transit in inbred mice with an increased number of interstitial cells of Cajal.

Am Journal Physiol gastrointest Liver Psysiol, Vol. 288, pp. G151-G158. **Impact Factor: 3,421.**

F. DE LORIJN, W.J. DE JONG, T. WEDEL, J.M. VANDERWINDEN, M.A. BENNINGA and G.E. BOECKXSTAENS.

Interstitial cells of Cajal are involved in the afferent limb of the rectoanal inhibitory reflex.

Colonic Motility, Vol. 54, pp. 1107-1113. **Impact Factor: 5,883.**

D. DAVID, F. PRESTORI, E. SOLA, A. D'ERRICO, C. ROUSSEL, L. FORTI, P. ROSSI and E. D'ANGELO.

Intracellular calcium regulation by burst discharge determines bidirectional long-term synaptic plasticity at the cerebellum input stage.

The Journal of Neuroscience, Vol. 25, Nr. 19, pp. 4813-4822. **Impact Factor: 8,306.**

D. GALL, C. ROUSSEL, T. NIEUS, G. CHERON, L. SERVAIS, E. D'ANGELO and S.N. SCHIFFMANN.
Role of calcium binding proteins in the control of cerebellar granule cell neuronal excitability : experimental and modeling studies.

Progress in Brain Research, Vol. 148, pp. 321-328. **Impact Factor: 2,194.**

E. GUNTZ, H. DUMONT, C. ROUSSEL, D. GALL, F. DUFRASNE, L. CUVELIER, D. BLUM, S.N.SCHIFFMANN and M. SOSNOWSKI.

Effects of remifentanil on N-methyl-D-aspartate receptor.

Anesthesiology, Vol. 102, pp. 1235-1241. **Impact Factor: 3,503.**

R. HOUREZ, K. AZDAD, G. VANWALLEGHEM, C. ROUSSEL, D. DAVID and S.N. SCHIFFMANN.

Activation of protein kinase C and inositol 1,4,5-triphosphate receptors antagonistically modulate voltage-gated sodium channels in striatal neurons.

Brain Research, Vol. 1059, pp. 189-196. **Impact Factor: 2,302.**

C. LANGLET, I. LANGERT, P. VERTONGEN, N. GASPARD, J.M. VANDERWINDEN and P. ROBBERECHT.

Contribution of the carboxyl terminus of the VPAC₁ receptor to agonist-induced receptor phosphorylation, internalization, and recycling.

The Journal of Biological Chemistry, Vol. 280, Nr. 30, pp. 28034-28043. **Impact Factor: 6,482.**

P. LAURENT, J. A.J. BECKER, O. VALVERDE, C. LEDENT, A. DE KERCKHOVE d'EXAERDE, S.N. SCHIFFMANN, R. MALDONADO, G. VASSAERT and M. PARMENTIER.

The prolactin-releasing peptide antagonizes the opioid system through its receptor GPR10

Nature Neuroscience, Vol. 8, Nr. 12, pp. 1735-1741. **Impact Factor : 16,980.**

P. NIESSEN, S. RENSEN, J. VAN DEURSEN, J. DE MAN, A. DE LAET, J.M. VANDERWINDEN, T. WEDEL, D. BAKER, P. DOEVENDANS, M. HOFKER, M. GIJBELS and G. VAN EYS.

Smoothelin-A is essential for functional intestinal smooth muscle contractility in mice.

Gastroenterology, Vol. 129, pp. 1592-1601. **Impact Factor: 12,182.**

L. SERVAIS, B. BEARZATTO, V. DELVAUX, E. NOËL, R. LEACH, M. BRASSEUR, S.N. SCHIFFMANN and C. GUY.

Effect of chronic ethanol ingestion on Purkinje and Golgi cell firing in vivo and on motor coordination in mice.

Brain Research, Vol. 1005, pp. 171-179. **Impact Factor: 2,302.**

L. SERVAIS, B. BEARZATTO, B. SCHAWALLER, M. DUMONT, C. DE SAEDELEER, B. DAN, J.J.BARSKI, S.N.SCHIFFMANN and G. CHERON.

Mono- and dual-frequency fast cerebellar oscillation in mice lacking parvalbumin and /or calbindin D-28K

European Journal of Neuroscience, Vol. 22, pp. 861-870. **Impact Factor: 3,899.**

M. WOUTERS, K. SMANS and J.M. VANDERWINDEN.

W^{ZsGreen}/+: a new green fluorescent protein knock-in mouse model for the study of KIT-expressing cells in gut and cerebellum.

Physiol. Genomics, Vol. 22, pp. 412-421. **Impact Factor: 4,368.**

Prof. Dr. Pierre Vanderhaeghen

J. EGEE, U.V. NISSEN, A. DUFOUR, M. SAHIN, K. KULLANDER, P. GREER, T.D. MRSIC-FLOGEL, M.E. GREENBERG, O. KIEHN and P.VANDERHAEGHEN.

Regulation of EphA4 kinase activity is required for a subset of axon guidance decisions suggesting a key role for receptor clustering in Eph Function.

Neuron, Vol. nr. 47, pp. 515-528. **Impact Factor:**

V. DEPAEPE, N. SUAREZ-GONZALES, A. DUFOUR, L. PASSANTE, J.A. GORSKI, K.R. JONES, C. LEDENT and P.VANDERHAEGHEN.

Ephrin signalling controls brain size by regulating apoptosis of neural progenitors.

Nature Letters, Vol. nr. 435, pp. 1244-1250. **Impact Factor:**

M.-A. LAMBOT, F. DEPASSE, J.-C. NOEL and P. VANDERHAEGHEN.

Mapping labels in the human developing visual system and the evolution of binocular vision.

The Journal of Neuroscience, Vol. nr. 25, nr. 31, pp. 7232-737. **Impact factor:**