

**PUBLICATIONS OF THE UNIVERSITY  
RESEARCH GROUPS**

**prof. dr. E. De Schutter, prof. dr P. Janssen,  
prof. dr. P. Maquet, prof. dr Y. Michotte,  
prof. dr. G. Orban, dr. L. Ris, prof. dr. E. Olivier  
prof. dr. S.N. Schiffmann, prof. dr. R. Vogels**

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**2006**

**VOLUME I**

**Prof. dr. E. De Schutter**

SOON-LIM SHIN and E. DE SCHUTTER.

**Dynamic synchronization of Purkinje cell simple spikes.**

Journal of Neurophysiology, Vol. 96, pp. 3485-3491. **Impact Factor: 3,652.**

**Prof. dr. P. Janssen**

G. ORBAN, P. JANSSEN and R. VOGELS

**Extracting 3D structure from disparity.**

Trends in Neuroscience, Vol. 29, nr. 8, pp.466-473. **Impact Factor: 14,325.**

**Prof. Dr. P. Maquet**

P. PEIGNEUX, P. ORBAN, E. BALTEAU, C. DEGUELDRE, A. LUXEN, S. LAUREYS and P. MAQUET.

**Offline persistence of memory-related cerebral activity during active wakefulness.**

PLOS Biology, Vol. 4, pp. 647-657. **Impact Factor: 14,101.**

T. T. DANG-VU, M. DESSEILLES, P. PEIGNEUX and P. MAQUET.

**A role for sleeping in brain plasticity.**

Pediatric Rehabilitation, Vol. 9, Nr. 2, pp. 98-118. **Impact Factor: 5,012.**

P. ORBAN, G. RAUCHS, E. BALTEAU, C. DEGUELDRE, A. LUXEN, P. PEIGNEUX and P. MAQUET.

**Sleep after spatial learning promotes covert reorganization of brain activity.**

PNAS, Vol. 103, Nr. 18, pp. 7124-7129. **Impact factor: 10,231.**

C. HOTERMANS, P. PEIGNEUX, A. MAERTENS DE NOODHOUT, G. MOONEN and P.MAQUET.

**Early boost and slow consolidation in motor skill learning.**

Learning and Memory. **Impact Factor: 5,099.**

M. DESSEILLES, THANH DANG VU, S. LAUREYS, P. PEIGNEUX, .C. DEGUELDRE, C. PHILLIPS and P. MAQUET.

**A prominent role for amygdaloid complexes in the variability in heart rate (VHR) during rapid eye movement (REM) sleep relative to wakefulness.**

NeuroImage, Vol. 32, pp. 1008-1015. **Impact Factor: 5,590.**

**Prof. dr. Yvette Michotte**

H. DEMAEGDT, P.-J. LENAERTS, J. SWALES, J.-P. DE BACKER, H. LAEREMANS, MINH TAN LE, K. KERSEMANS, LOTTE K. VOGEL, P. VANDERHEYDEN, G. VAUQUELIN and Y. MICHOTTE.

**Angiotensin AT<sub>4</sub> receptor ligand interaction with cystinyl aminopeptidase and aminopeptidase N: {<sup>125</sup>I}Angiotensin IV only binds to the cystinyl aminopeptidase apo-enzyme**

European Journal of Pharmacology, Vol. 546, pp. 19-27. **Impact Factor: 2,500.**

P. M. L. VANDERHEYDEN, H. DEMAEGDT, J. SWALES, P.-J. LENAERTS, J.-P. DE BACKER , LOTTE K. VOGEL and G. VAUQUELIN.

**Synergistic inhibition of the enzymatic activity of aminopeptidase N by divalent metal ion chelators.**

Fundamental and Clinical Pharmacology, Vol. 20, pp. 613-619. **Impact Factor: 1,700.**

A. AXÉN, G. LINDEBERG, H. DEMAEGDT, G. VAUQUELIN, A. KARLÉN and M. HALLBERG.  
**Cyclic insulin-regulated aminopeptidase (IRAP)/AT<sub>4</sub> receptor ligands.**  
Journal of Peptide Science, Vol. 12, pp. 705-713. **Impact Factor: 1,800.**

BART STRAGIER

**Characterization of the interaction between angiotensin fragments and the central neurotransmitter systems.**

**Doctoraatsthesis 2006 (Niet in de verzameling).**

**Prof dr. E. Olivier**

M. DAVARE, M. ANDRES, G. COSNARD, J.-L. THONNARD and E. OLIVIER.

**Dissociating the role of ventral and dorsal premotor cortex in precision grasping.**

The Journal of Neuroscience, Vol. 26, nr. 8, pp. 2260-2268. **Impact Factor: 3,853.**

**Prof. Dr. G.A. Orban**

H. SAWAMURA, R. VOGELS and G.A. ORBAN.

**Selectivity of neuronal adaptation does not match response selectivity: a single-cell study of the fMRI adaptation paradigm.**

Neuron, Vol. 49, pp. 307-318. **Impact Factor: 14,304.**

G. ORBAN, P. JANSSEN and R. VOGELS

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Trends in Neuroscience, Vol. 29, nr. 8, pp.466-473. **Impact Factor: 14,325.**

**Dr L. Ris**

B. CAPRON, C. SINDIC, E. GDAUX and L. RIS.

**The characteristics of LTP induced in hippocampal slices are dependent on slice-recovery conditions.**

Learning and Memory, Vol. 13, pp. 271-277. **Impact Factor: 4,000.**

K. MIZUNO, A. SANCHEZ-CAPELO, E. GODAUX, K. PETER GIESE and L. RIS.

**Ca<sup>2+</sup>/calmodulin kinase kinase  $\alpha$  is dispensable for brain development but is required for distinct memories in male, though not in female, mice.**

Molecular and Cellular Biology, Vol. 26, pp. 9094-9104. **Impact Factor: 7,100.**

**Prof. Dr. Serge .N. Schiffmann**

B. BEARZATTO, L. SERVAIS, C. ROUSSEL, D. GALL, F. BABA-AÏSA, S. SCHURMANS, A.de KERCHOVE d'EXAERDE, G. CHERON and S.N.SCHIFFMANN.

**Targeted calretinin expression in granule cells of calretinin-null mice restores normal cerebellar functions**

FASEB, Vol. 20, pp. 380-382. **Impact Factor: 6,721.**

K. KHELIF, M. SCAILLON, M.J.M. GOVAERTS, J.M. VANDERWINDEN, M.H. DE LAET.

**Bilateral thoracoscopic splanchicectomy in chronic intestinal pseudo-obstruction: report of two paediatric cases.**

Gut, Vol. 55, pp. 293-294. **Impact Factor: 9,002.**

P. ROSSI, L. MAPELLI, L. ROGGERI, D. GALL, A. de KERCHOVE d'EXAERDE, V. TAGLIETTI, E. D'ANGELO and S.N. SCHIFFMANN.

**Inhibition of constitutive inward rectifier currents in cerebellar granule cells by pharmacological and synaptic activation of GABA<sub>B</sub> receptors.**

European Journal of Neurosciences, Vol. 24, pp. 419-432. **Impact factor: 3,709.**

C. ROUSSEL, T. ERNEUX, D. GALL and S.N. SCHIFFMANN.

**Modulation of neuronal excitability by intracellular calcium buffering: from spiking to bursting.**  
Cell Calcium, Vol. 39, pp. 455-466. **Impact Factor: 4,118.**

J.M. VANDERWINDEN, D. WANG, N. PATERNOTTE, S. MIGNON, K. ISOZAKI and C. ERNEUX.

**Differences in signaling pathways and expression level of the phosphoinositide phosphatase SHIP1 between two oncogenic mutants of the receptor tyrosine kinase KIT.**  
Cellular Signalling, Vol. 18, pp. 661-669. **Impact Factor: 4,887.**

T.WENDEL, G.J.J.M. VAN EYS, D. WALTREGNY, W. GLENISSON, V. CASTRONOVO and J.M. VANDERWINDEN.

**Novel smooth muscle markers reveal abnormalities of the intestinal musculature in severe colorectal motility disorders.**  
Neurogastroenterology and Motility, Vol. 18, pp. 526-538. **Impact Factor: 3,338.**

M. WOUTERS, A. DE LAET, L. VERDONCK, E. DELPIRE, P.P. VAN BOGAERT, J.P. TIMMERMANS, A. de KERCHOVE d'EXAERDE, K. SMANS, J.M.

**Subtractive hybridization unravels a role for the ion cotransporter NKCC1 in the murine intestinal pacemaker.**

Am Journal Physiol Gastrointest, Vol. 290, pp. G1219-G1227. **Impact Factor: 3,681.**

M.WOUTERS, J.-M. NEEFSA. De KERCHOVE d'EXAERDE, J.-M. VANDERWINDEN and K.A. SMANS.

**Downregulation of two novel genes in SI/SId and W<sup>LacZ</sup>/W<sup>v</sup> Mouse jejunum.**

Biochemical and Biophysical Research Communication, Vol. 346, pp. 491-500. **Impact factor: 2,855**

### **Prof. dr. R. Vogels**

G. SANTOSH MYSORE, STEVE E. RAIGUEL, GUY A. ORBAN and R. VOGELS.

**Processing of kinetic boundaries in Macaque V4**

Journal of Neuroscience, Vol. 26, pp. 6589-6602. **Impact Factor: 3,853.**

HIROMASA SAWAMURA, GUY A. ORBAN and R. VOGELS.

**Selectivity of neuronal adaptation does not match response selectivity: a single-cell study of the fMRI paradigm.**

Neuron, Vol. 49, pp. 307-318. **Impact Factor: 14,304.**

STEVEN RAIGUEL, SANTOSH G. MYSORE, GUY. A. ORBAN and R. VOGELS.

**Learning to see the difference specifically alters the most informative V4 neurons.**

The Journal of neuroscience, Vol. 26, nr. 24, pp. 6589-6602. **Impact Factor: 7,506.**

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