

**PUBLICATIONS DES ÉQUIPES UNIVERSITAIRES  
DE RECHERCHE**

**prof. dr. G. Moonen, prof. dr. G. Orban,  
prof. dr. M. Pandolfo, prof. dr. M. Parmentier,  
dr. L. Ris, prof. dr. S.N. Schiffmann,  
prof. dr. C. Van Broeckhoven, prof. dr. W. Vanduffel,  
dr. P. Vanderhaeghen, prof. dr. R. Vogels**

**SUBVENTIONNÉES AVEC DES CRÉDITS DE LA**

**FONDATION MÉDICALE REINE  
ELISABETH**

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**VOLUME II**

### **Prof. Dr. G. Moonen**

S. WISLET-GENDEBIEN, F. BRUYÈRE, G. HANS, P. LEPRINCE, B.ROGISTER and G.MOONEN.  
**Nestin positive mesenchymal stem cells favour the astroglial lineage in neural progenitors and stem cells by releasing active BMP4.**  
BMC Neuroscience, pp. 1 - 12. **Impact Factor:**

L. NGUYEN, B. MALGRANGE, I. BREUSKIN, F. LALLEMEND, G. HANS, S. BELACHEW, J.M. RIGO and G.MOONEN.  
**Striatal PSA-NCAM<sup>+</sup> precursor cells from the newborn rat express functional glycine receptors.**  
Molecular Neuroscience, Vol. 15, Nr. 4, pp.583 - 587. **Impact Factor: 2,503.**

### **Prof. Dr. G. Orban**

K.DENYS, D.FIZE, K.NELISSEN, H.PEUSKENS, D. AN ESSEN, W.VANDUFFEL and GUY ORBAN.  
**The processing of visual shape in the cerebral cortex of human and nonhuman primates: a functional magnetic resonance imaging study.**  
The Journal of Neuroscience, Vol 24, Nr. 10, pp. 2551 - 2565. **Impact Factor: 7,907**

YAN LIU, R. VOGELS and G. A. ORBAN  
**Convergence of depth from texture and depth from disparity in macaque inferior temporal cortex.**  
The Journal of Neuroscience, Vol 24, Nr. 15, pp. 3795 - 3800. **Impact Factor:7,907**

H. PEUSKENS, K.G. CLEAYS, J.T.TODD, J.FARLEY NORMAN, P. VAN HECKE and G. A. ORBAN  
**Attention to 3-D shape, 3-D motion, and texture in 3-D structure from motion displays.**  
The Journal of Cognitive Neuroscience, Vol 16, Nr. 4, pp. 665 - 682. **Impact Factor: 5.275**

K.DENYS, D.FIZE, K.NELISSEN, H.SAWAMURA, S.GEORGIEVA, R.VOGELS, D.VAN ESSEN, W.VANDUFFEL and G.A.ORBAN  
**Visual activation in prefrontal cortex is stronger in monkeys than in humans.**  
The Journal of Cognitive Neuroscience, Vol. 16, Nr. 9, pp. 1505 – 1516.  
**Impact Factor: 5,275**

D.VAN ESSEN, W.VANDUFFEL and G.A.ORBAN.  
**Comparative mapping of higher visual areas in monkeys and humans.**  
Trends in Cognitive Sciences, Vol. 8, Nr. 7, pp.315 – 324. **Impact Factor: 7,992**

K.G. CLEAYS, P. DUPONT, L. CORNETTE, S. SUNAERT, P. VAN HECKE, E. DE SCHUTTER and G. ORBAN.  
**Color discrimination involves ventral and dorsal stream visual areas.**  
Cerebral Cortex, Vol. 14, pp. 803 – 822. **Impact Factor: 5,322.**

### **Prof. Dr.M. Pandolfo**

C.J. MIRANDA, M.M. SANTOS, K. OHSIHIMA, M. TESSARO, J. SEQUEIROS and M. PANDOLFO.  
**Fratxin over expressing mice.**  
Febs Letters,, Vol. 572, pp.281 - 288. **Impact Factor: 3,644.**

### **Prof. Dr. M. Parmentier**

V.WITTAMER, F. GREGOIRE, P. ROBBERECHT, G. VASSART, D. COMMUNI and M. PARMENTIER  
**The C-terminal nonapeptide of mature chemerin activates the chemerin receptor with low nanomolar potency.**  
The Journal of Biological Chemistry, Vol.279, pp.9956 - 9962. **Impact Factor: 6,360.**

LAILA EL-ASMAR, J.-Y SPRINGAEL, S. BALLETT, E.U.ANDRIEU, G.VASSART and M.PARMENTIER.  
**Evidence for negative binding cooperativity within CCR5-CCR2b heterodimers.**  
Molecular Pharmacology, Vol.67, Nr. 2, pp.460 - 469. **Impact Factor: .**

**Dr. L. Ris en Prof. Dr. E. Godaux**

R. POSTIMA, A. SCHROEDER, I. DEWACHTER, J. BOHL, U. SCHMITT, E. KOJRO; C. PRINZEN, K. ENDRES, C. HIEMKE, M. BLESSING, P. FLAMEZ, A. DEQUENNE, F. VAN LEUVEN, F. FAHRENHOLZ and E. GODAUX..

**A dsintegrin-metalloproteinase prevents amyloid plaque formation and hippocampal defects in an Alzheimer disease mouse model.**

The Journal of clinical Investigation, Vol.112, Nr. 10, pp.1456 - 1464. **Impact Factor: 8,500.**

**Prof. Dr. S.N. Schiffmann**

D. BLUM, M.J.GALAS, L.CUVELIER and S.N.SCHIFFMANN.

**Chronic intoxication with 3-nitropropionic acid in rats induced the loss of striatal dopamine terminals without affecting nigral cell viability.**

Neuroscience Letters, Vol.354, pp.234 - 238. **Impact Factor: 2,100.**

P. MAURER, S. RORIVE, A. de KERCKHOVE d'EXAERDE, I. SALMON, Y. DE LAUNOIT and S.N. SCHIFFMANN.

**The Ets transcription factor Fev is specifically expressed in the human central serotonergic neurons.**

Neuroscience Letters, Vol.357, pp.215 - 218. **Impact Factor: 2,100.**

L. SERVAIS, B. BEARZATTO, R. HOUREZ, B. DAN, G. CHERON and S.N.SCHIFFMANN.

**Effect of simple spike firing mode on complex spike firing rate and waveform in cerebellar purkinje cells in non-anesthetized mice..**

Neuroscience Letters Vol.367, pp.171 - 176. **Impact Factor: 2,100.**

D. BLUM, F. J. HEMMING, M-J GALAS, S. TORCH, L. CUVELIER, R. SADOUL and S.N.SCHIFFMANN.

**Increased alix (apoptosis-linked gene-2 interacting protein X) immunoreactivity in the degenerating stratum of rats chronically treated by 3-nitropropionic acid.**

Neuroscience Letters, Vol. 368, pp.309 - 311. **Impact Factor: 2,100.**

G. CHERON, D. GALL, L. SERVAIS, B. DAN, R. MAEX and S.N.SCHIFFMANN.

**Inactivation of calcium-binding protein genes induces 160 Hz oscillations in the cerebellar cortex of alert mice.**

The Journal of Neuroscience, Vol.24, Nr. 2, pp.434 - 441 **Impact Factor: 8,306.**

V. CORONAS, K.BANTUBUNGI, J. FOMBONNE, S.KRANTIC, M. ROGER and S.N.SCHIFFMANN.

**Dopamine D<sub>3</sub> receptor stimulation promotes the proliferation of cells derived from the post-natal subventricular zone.**

Journal of Neurochemistry, Vol.91, pp.1292 – 1301. **Impact Factor: 4,825.**

M-C GALAS, N. BIZAT, L. CUVELIER, K. BANTUBUNGI, E. BROUILLET, D. BLUM and S.N.SCHIFFMANN..

**Death of cortical and striatal neurons induced by mitochondrial defect involves differential molecular mechanisms.**

Neurobiology of Disease, Vol.15, pp.152 - 159. **Impact Factor: 2,100.**

D. SAUER, J-M VANDERWINDEN, B. SEIDLER, R.M. SCHMID, M-H DE LAET and H-D ALLESCHER.

**Single-nucleotide promoter polymorphism alters transcription of neuronal nitric oxide synthase exon 1c in infantile hypertrophic pyloric stenosis.**

PNAS, Vol. 101, Nr. 6, pp. 1662 – 1667. **Impact Factor: 10,260.**

S. SOKOLOV, M. MANTO, P. GAILLY, J. MOLGO, C. VANDEBROUCK, J-M. VANDERWINDEN A. HERCHUELZ and S. SCHURMANS.

**Impaired neuromuscular transmission and skeletal muscle fiber necrosis in mice lacking Na/Ca exchanger 3.**

The Journal of Clinical Investigation, Vol. 113, Nr. 2, pp.265 – 273. **Impact Factor: 14,051.**

S. SWILLEN, J-C. GOFFARD, Y. MARECHAL, ALBAN de KERCKHOVE d' EXAERDE and H. EL HOUSNI.

**Instant evaluation of the absolute initial number of cDNA copies from a single real-time PCR curve.**

Nucleic Acids Research, Vol. 32, Nr. 6/e56, pp.1 – 6.

### **Prof. Dr. W. Vanduffel**

K.DENYS, D.FIZE, K.NELISSEN, H.PEUSKENS, D;VAN ESSEN? GUY ORBAN and W.VANDUFFEL.

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### **Prof. Dr. C. Van Broeckhoven**

L.CLAES, B.DERMAUT, L.DEPREZ, W.VAN PAESSCHEN, C.DUPOND, D.GOOSSENS, J.DEL-FAVERO, P.DE JONGHE and C.VAN BROECKHOVEN.

**Novel locus on chromosome 12q-q23.3 responsible for familial temporal lobe epilepsy associated with febrile seizures.**

J.Med. Genet, Vol 41, pp.710 - 714. **Impact Factor:7,774.**

L.CLAES, B.CEULEMANS, D.AUDENAERT, L.DEPREZ, A.JANSSEN, D.HASAERT, S;WECKX, K.G.CLAEYS, J.DEL-FAVERO, P; DE JONGHE and C.VAN BROECKHOVEN.

**De novo KCNQ2 mutations in patients with benign neonatal seizures.**

Neurology, Vol Nr. 63, pp.2155 - 2158.. **Impact Factor: 5,340.**

K.VERHOEVEN, K.COEN, E.DE VRIENDT, A.JACOBS, V.VAN GERVEN, I.SMOUTS, A.POU-SERRADAL, J.J.MARTIN, V.TIMMERMAN and P.DE JONGHE..

**SPTLC1 mutation in twin sisters with hereditary sensory neuropathy type I.**

Neurology, Vol.62, pp.1001 - 1002. **Impact Factor: 5,340.**

E.NELIS, J.BERCIAMO, N.VERPOORTEN, K.COEN, I.DIERICK, V.VAN GERWEN, O.COMBERROS, P.DEJONGHE and V;TIMMERMAN.

**Autosomal dominant axonal Charcot-Marie-Tooth disease type 2( CMT2G) maps to chromosome 12q12-q13.3.**

J.Med Genet, Vol.4, pp.193 - 197. **Impact Factor: 7,774.**

C.L.BENNETT, A.J.SHIRK, H.M.HUYMH, V.A.STREET, E.NELIS, L.VAN MALDERGEM, P.DE JONGHE, A. JORDANOVA, V.GUERGUETCHEVA, I.TOURNEV, P.VAN DEN BERGHE, P.SEEMAN, R.MAZANEC, T.PROCHAZKA, I.KREMENSKY, J.HABERLOVA, M.D.WEISS, V.TIMMERMAN, T.D.BIRD and P.F.CHANCE.

**SIMPLE mutation in demyelinating neuropathy and distribution in sciatic nerve.**

Ann Neurol, Vol.55, pp.713 - 720. **Impact factor: 8,603.**

JIROBI, P.VAN DEN BERGHE, L.MELINI, C.VERELLEN, L.VAN MALDERGEM, I.DIERICK, N.VREPOORTEN, A.JORDANOVA, C.WINDPASSINGER, E.DEVRIENDT, V.VAN GERWEN, M.AUER-GRUMBACH, K.WAGNER, V.TIMMERMAN and P.DE JONGHE.

**The phenotype of motor neuropathies associated with *BSCL2* mutations is broader than silver syndrome and distal HMN type V**

Brain, Vol. 127, pp. 2124 – 2130. **Impact Factor: 7,122.**

Y.PARMAN, E.BATTALOGLU, I.BARIS, B.BILIR, M.POYRAZ, N.BISSAR-TADMOURI, A.WILLIAMS, N.AMMAR, E.NELIS, V.TIMMERMAN, P.DE JONGHE, A.NECEFOV; F.DEYMEER, P.SERDAROGLU, P.J.BROPHY and G.SAID.

**Clinicopathological and genetic study of early-onset demyelinating neuropathy.**

Brain, Vol. 127, pp. 2540 – 2550. **Impact Factor: 7,122.**

Y-ZHANG CHEN, C.L.BENNETT, H.M.HUYNH, I.P.BLAIR, I.PULS, J.IROBI, I.DIERICK, A.ABEL, M.L.KENNERSON, B.A.RABIN, G.A.NICHOLSON, M.AUER-GRUMBACH, K.WAGNER, P.DE JONGHE, J.W.GRIFFIN, K.H.FISCHBECK, V.TIMMERMAN, D.R.CORNBLATH and P.F.CHANCE.

**DNA/RNA helicase gene mutations in a form of juvenile amyotrophic lateral sclerosis (ALS4)**

Am. Journal Hum. Genet., Vol. 74, pp. 1128 – 1135. **Impact Factor:10,649.**

C.WINDPASSINGER, M.AUER-GRUMBACH, J.IROBI, H.PATEL, E.PETEK, G.HÖRL, R.MALLI, J.A.REED, I.DIERICK, N.VERPOORTEN, T.T.WARNER, C.PROUKAKIS, P.VAN DEN BERGH, C.VERELLEN, L.VAN MALDERGEM, L.MERLINI, P.DE LONGHE, V.TIMMERMAN, A.H.CROSBY and K.WAGNER.

**Heterozygous missense mutations in *BSCL2* are associated with distal hereditary motor neuropathy and silver syndrome.**

Nature Genetics, Letters, pp. 1 – 16. **Impact Factor: 26,711.**

O.V.EVGRAFOV, I.MERIYANOVA, J.IROBI, L.VAN DEN BOSCH, I.DIERICK, C.L.LEUNG, O.SCHAGINA, N.VERPOORTEN, K.VAN IMPE, V.FEDOTOV, E.DADALI, M.AUER-GRUMBACH, C.WINDPASSINGER, K.WAGNER, Z.MITROVIC, D.HILTON-JONES, K.TALBOT, J.J.MARTIN, N.VASSERMAN, S.TVERSKAYA, A.POLYKOV, R.K.H.LIEM, J.GETTEMANS, W.ROBBERTCHT, P.DE JONHE and V.TIMMERMAN.

**Mutant small heat-shock protein 27 causes axonal Charcot-Marie-Tooth disease and distal hereditary motor neuropathy.**

Nature Genetics Letters, Vol. 36, Nr 6, pp. 602 – 606. **Impact Factor: 26,711.**

J.IROBI, K.VAN IMPE, P.SEEMAN, A.JORDANOVA, I.DIERICK, N.VERPOORTEN, A.MICHALIK, E.DE VRIENDT, A.JACOBS, V.VAN GERWEN, K.VENNEKENS, R.MAZANEC, I.TOURNEV, D.HILTON-JONES, K.TALBOT, I.KREMENSKY, L.VAN DEN BOSCH, W.ROBBERECHT, J.VANDENKERCKHOVE, J.GETTEMANS, P.DE JONGHE, V.TIMMERMAN and C VAN BROECKHOVEN.

**Hot-Spot residue in small heat-shock protein 22 causes distal motor neuropathy.**

Nature Genetics Letters, Vol. 26, Nr 6, pp. 597 – 601. **Impact Factor:26,711.**

R.RADEMAKERS, M.VAN DEN BROECK, K.SLEEGERS, C.VAN DUIJN, M.CRUTS and C. VAN BROECKHOVEN.

**Absence of pathogenic mutations in presenilin Homologue 2 in a conclusively 17- linked tau-negative dementia family.**

Neurogenetics, Vol. 5, pp. 79 -80. **Impact Factor: 3.028.**

S.HELISALMI, B.DERMAUT, M.HILTUNEN, A.MANNERMAA, M.VAN DEN BROECK, M.LEHTOVIRTA, A.M.KOIVISTA, S.IIVONEN, M.CRUTS, H.SOININEN and C.VAN BROECKHOVEN.

**Possible association of nicastrin polymorphisms and Alzheimer disease in the finnish population.**

Neurology, Vol. 63, pp. 173 – 175. **Impact Factor: 5.678.**

R.RADEMAKERS, M.CRUTS and C.VAN BROECKHOVEN.

**The role of tau (*MAPT*) in frontotemporal dementia and related tauopathies.**

Human Mutations, Vol. 24, pp. 277 – 295. **Impact Factor: 6.328.**

K.SLEEGERS, G.ROKS, J.THEUNIS, Y.S.AULCHENKO, R.RADEMAKERS, M.CRUTS, W.A.VAN GOOL, P.HEUTINK, B.A.OOSTRA, J.C. VAN SWIETEN, C.M.VAN DUIJN and C.VAN BROECKHOVEN.  
**Familial clustering and genetic risk for dementia in a genetically isolated Dutch population.**  
Brain, Vol. 127, pp. 1641 – 1649. **Impact Factor: 7.967**

B.DERMAUT, S.KUMAR-SINGH, S.ENGELBORGHES, J.THEUNIS, R.RADEMAKERS, J.SAERENS, B.A.PICKUT, K.PEETERS, M.VAN DEN BROECK, K.VENNEKENS, S.CLEAS, M.CRUTS, P.CRAS, J.J.MARTIN, P.P.DE DEYN and C.VAN BROECKHOVEN.  
**A novel presenilin 1 mutation associated with pick's disease but not  $\beta$ -Amyloid plaques.**  
Ann Neurol, Vol. 55, pp. 617 – 626. **Impact Factor: 7.7**

### **Dr P. Vanderhaeghen**

F.POLLEUX and P.VANDERHAEGHEN.

**Developmental mechanisms patterning thalamocortical projections: intrinsic, extrinsic and in between.**

Trends in Neurosciences, Vol.27, Nr 7, pp. 384 - 391. **Impact Factor: 17,400.**

### **Prof. Dr. R. Vogels**

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