

**PUBLICATIONS OF THE UNIVERSITY  
RESEARCH GROUPS**

**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**

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**QUEEN ELISABETH MEDICAL  
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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. BALLEET, 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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