



**Scientific report**  
**Institute Born-Bunge**



**2008**

The past year has again been successful for the scientific community of the Institute Born-Bunge (IBB). The scientific output was extensive and of a very high scientific quality as reflected by the high impact factors (see Figure 1) has been achieved.

In addition to the agreement between the IBB and the University of Antwerp and the recognition of our research community as a Research Excellence Center, entitled NEURO, a new organizational/scientific strategic plan has been implemented for the IBB.

Within the new strategic IBB organigram there has been chosen to further extend the IBB Biobank as a central facility and this in accordance with the agreement IBB-UA. The Antwerp Biobank delivered a favourable yearly report to the Antwerp University and further expanded its valuable collection supporting research groups within our institution, the University of Antwerp and other national and international research institutes active in neurosciences. For the optimisation of the scientific progress, 'task forces' have been formed, related to the different laboratories and clinical research groups, with indication of the responsible persons. These 'task forces' are topic-related and use the service of the central facility and are responsible for obtaining grants and by this contribute to the means of the central facility and therefore insure the continuity of this facility. The contribution of the IBB scientific community to the Methusalem project NEURONET has been outlined and highlighted.

In 2008 an agreement between the University of Antwerp and the IBB has been signed regarding collaborative efforts involving innovative scientific infrastructure (Hercules project). This is of significance to the scientific community of the IBB and guarantees an optimal continuity of the Electron Microscopic research within the IBB in general and the LUN in particular.

The three 'task forces', which have significant overlap with the central Biobank facility, produced significant deliverables. They gave concrete form to their assignment within the existing laboratories.

Below we list those task forces again:

**TF1: Neuromuscular Disorders**

Responsible: C. de Groote in collaboration with P. De Jonghe/V. Timmerman and K. Claeys

Consultant: J.J. Martin

(Neuromuscular Research Center UZA, Laboratory for Ultrastructural Neuropathology)

**TF2: Prion Diseases**

Responsible: P. Cras  
(Lab. of Neurobiology)

**TF3: Central Nervous System Neurodegenerative Disorders (dementia-Alzheimer's disease etc./Parkinson)**

Responsible: C. Van Broeckhoven & P.P. De Deyn in collaboration with S. Engelborghs, S. Kumar-Singh.  
Consultant: J.J. Martin  
(Laboratory for Neurogenetics, Laboratory for Neurochemistry and Behaviour)

The functional organigram remained unchanged:

Central facilities:

Administration  
Photography  
Biobank with overlapping 'task-forces' to the different laboratories (scientific coordinator)

Department of Neurology

Laboratory for Ultrastructural Neuropathology (C. de Groote)  
Laboratory for Neurobiology (P. Cras)  
Laboratory for Neurogenetics (C. Van Broeckhoven)  
    Neurodegenerative Brain Diseases (C. Van Broeckhoven)  
    Peripheral Neuropathies (V. Timmerman)  
    Neurogenetics (P. De Jonghe)  
Laboratory for Neurochemistry and Behaviour (P.P. De Deyn)  
Laboratory for Theoretic Neurobiology (E. De Schutter)

Department of Cardiology

Laboratory for Cardiovascular Research (P.P. van Bogaert)

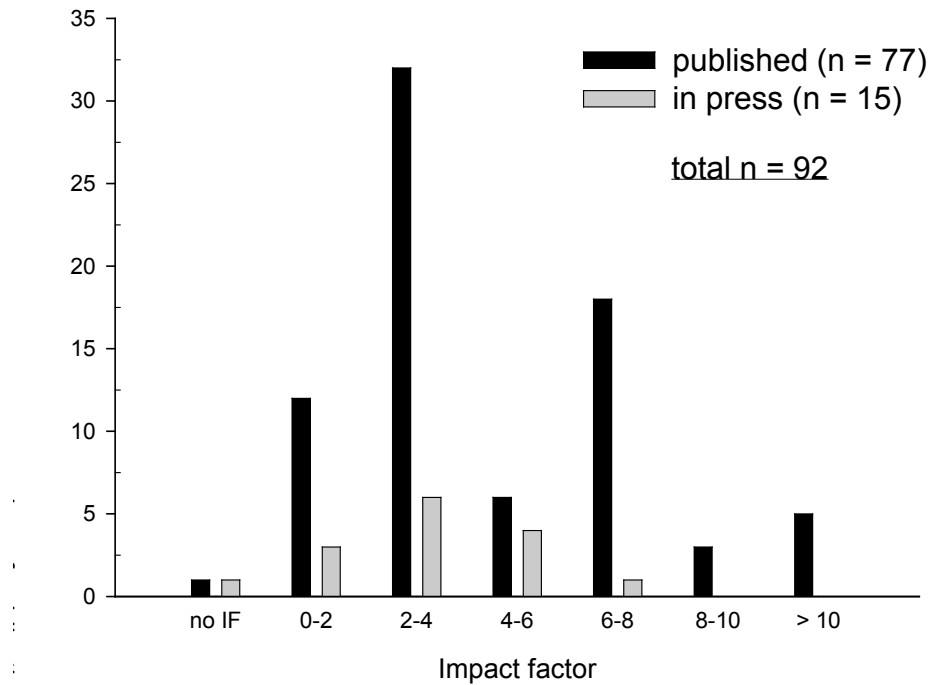
**The scientific output was extensive and of a very high competitive scientific international level:**

As in the past, the scientific output of the IBB laboratories was very extensive and the level can be compared with that of other internationally renowned top institutes for scientific research. Below, you will find a detailed scientific report outlining major research lines and output 2008 (addendum I).

Addendum II gives all the scientific references from the past year. It includes a list of more than 90 peer reviewed articles published in journals with considerable important impact factor as illustrated in figure 1. Among the top journals are listed: Brain,

Human Mutation, American Journal Human Genetics, Neuron, Neurobiology of Aging, Neurology, Archives of Neurology, and many more.

Figure 1: Total number of IBB publications in 2008



The entire scientific committee and all members of the IBB are very grateful to the Board of Directors for the granted trust and will continue their endeavour to further pursue the goals of the Institute.

Prof. Dr. P.P. De Deyn  
Scientific Director IBB  
March 2008.

## Addendum II:

### **WETENSCHAPPELIJKE PUBLICATIES 2008**

#### **INCL. MANUSCRIPTEN INGEDIEND, AANVAARD OF IN DRUK**

1. Aalten P., F.R. Verhey, M. Boziki, A. Brugnolo, R. Bullock, E.J. Byrne, V. Camus, M. Caputo, D. Collins, P.P. De Deyn, K. Elina, G. Frisoni, C. Holmes, C. Hurt, A. Marriott, P. Mecocci, F. Nobili, P.J. Ousset, E. Reynish, E. Salmon, M. Tsolaki, B. Vellas, P.H. Robert. (2008) Consistency of neuropsychiatric syndromes across dementias: Results from the European Alzheimer Disease Consortium. Part II. *Dement. Geriatr. Cogn. Disord.* 25 (1): 1-8 (IF 2007: 2.641)
2. Achard P, De Schutter E (2008) Calcium, synaptic plasticity and intrinsic homeostasis in purkinje neuron models. *Front Comput Neurosci.*;2:8. (no IF)
3. Aries M.J., Debruyne H., Engelborghs S., Le Bastard N., Somers N., Gorissen D., Pickut B.A., De Deyn P.P. (2008) Reversal of head drop after discontinuation of olanzapine in a DLB patient. *Mov. Disord.* 23 (12): 1760-1762 (IF 2007: 3.207)
4. Aries M.J.H., N. Le Bastard, H. Debruyne, M. Van Buggenhout, G. Nagels, P.P. De Deyn, S. Engelborghs. Relation between frontal lobe symptoms and dementia severity across diagnostic categories. *Psychological Medicine*, submitted. (IF 2007: 4.212)
5. Babiloni C., P.J. Visser, G. Frisoni, P.P. De Deyn, L. Bresciani, V. Jelic, G. Nagels, G. Rodriguez, P.M. Rossini, F. Vecchio, D. Colombo, F. Verhey, L.O. Wahlund, F. Nobili. Cortical sources of resting EEG rhythms in mild cognitive impairment and subjective memory complaint. *Neurobiol. Aging* 2008 Nov 20, doi:10.1016/j.neurobiolaging.2008.09.020 (IF 2007: 5.607)
6. Baets J, Dierick I, Ceuterick-de Groote C, Van Den Ende J.J, Martin J-J, Geens K, Robberecht W, Nelis E, Timmerman V, De Jonghe P (2009) Peripheral neuropathy and 46XY gonadal dysgenesis:: a heterogeneous entity". *Neuromuscul. Disord.*, 19:172-175. (IF 2007: 2.667)
7. Baillieux H, De Smet HJ, Paquier PF, De Deyn PP, Mariën P (2008) Cerebellar neurocognition: insights into the bottom of the brain. *Clin Neurol Neurosurg.*, 110(8):763-73. (IF 2007: 1.553)
8. Baillieux H, Vandervliet EJ, Manto M, Parizel PM, De Deyn PP, Mariën P (2009) Developmental dyslexia and widespread activation across the cerebellar hemispheres. *Brain Lang.*, 108(2):122-32. (IF 2007: 2.641)
9. Baillieux H, Verslegers W, Paquier P, De Deyn PP, Mariën P (2008) Cerebellar cognitive affective syndrome associated with topiramate. *Clin Neurol Neurosurg.*, 110(5):496-9. (IF 2007: 1.553)
10. Bettens K., N. Brouwers, S. Engelborghs, T. De Pooter, P.P. De Deyn, K. Sleegers, C. Van Broeckhoven. DNMBP is genetically associated with Alzheimer dementia in the Belgian population. *Neurobiol. Aging* 2008 March 21; doi:10.1016/j.neurobiolaging.2008.02.003 (IF 2007: 5.607)
11. Bettens, K., Brouwers, N., Engelborghs, S., De Deyn, P., Van Broeckhoven, C., Sleegers, K. (2008) SORL1 is genetically associated with increased risk for late-

- onset Alzheimer disease in the Belgian population. *Human Mutation* 29(5): 769-770. (IF 2007: 6.273)
12. Bogaerts V., K. Nuytemans, J. Reumers, P. Pals, S. Engelborghs, B. Pickut, E. Corsmit, K. Peeters, J. Schymkowitz, P.P. De Deyn, P. Cras, F. Rousseau, J. Theuns, C. Van Broeckhoven (2008). Genetic variability in the mitochondrial serine protease HTRA2 contributes to risk for Parkinson disease. *Hum. Mutat.* 29 (6): 832-840 (IF 2007: 6.273)
  13. Bogaerts,V., Theuns,J., Van Broeckhoven,C. (2008) Genetic findings in Parkinson's disease and translation into treatment: a leading role for mitochondria *Genes Brain and Behavior* 7(2): 129-151. (IF 2007: 3.533)
  14. Boon P., S. Engelborghs, H. Hauman, A. Jansen, L. Lagae, B. Legros, M. Ossemans, B. Sadzot, E. Urbain, K. Van Rijckervorsel (2008). Recommendations for the treatment of epilepsies in general practice in Belgium. *Acta Neurol. Belg.* 108: 118-130 (IF 2007: 0.606)
  15. Brouns R, Eyskens F, De Boeck K, Ceuterick-de Groote C, Van den Broeck M, Van Broeckhoven C, De Deyn PP. Fabry disease in a patient with Turner syndrome. Nature's experiment on lyonisation in X-linked disorders. *J. Inherit. Metab. Dis.* – in press. (IF 2007: 1.668)
  16. Brouns R, Heylen E, Sheorajpanday R, Willemsse JL, Kunnen J, De Surgeloose D, Hendriks DF, De Deyn PP (2009) Carboxypeptidase U (TAFIIa) decreases the efficacy of thrombolytic therapy in ischemic stroke patients. *Clin Neurol Neurosurg.* 2009 Feb;111(2):165-70. (IF 2007: 1.553)
  17. Brouns R, Marescau B, Possemiers I, Sheorajpanday R, De Deyn PP. Dimethylarginine levels in Cerebrospinal fluid of hyperacute ischemic stroke patients are associated with stroke severity. *Neurochem Res*, In press, DOI 10.1007/s11064-009.9954.3. (IF 2007: 1.811)
  18. Brouns R, Sheorajpanday R, Kunnen J, De Surgeloose D, De Deyn PP. Clinical, biochemical and neuroimaging parameters after thrombolytic therapy predict long-term stroke outcome. *Eur Neurol*, 2009; 774: In press, DOI: 10.1159/000XXXXXX. (IF 2007: 1.323)
  19. Brouns R, Sheorajpanday R, Wauters A, De Surgeloose D, Mariën P, De Deyn PP (2008) Evaluation of lactate as a marker of metabolic stress and cause of secondary damage in acute ischemic stroke or TIA. *Clin Chim Acta.*, 397(1-2):27-31. (IF 2007: 2.601).
  20. Brouwers N, Slegers K, Engelborghs S, Maurer-Stroh S, Gijssels I, van der Zee J, Pickut BA, Van den Broeck M, Matheijssens M, Peeters K, Schymkowitz J, Rousseau F, Martin J-J, Cruts M, de Deyn PP, Van Broeckhoven C (2008) Genetic variability in progranulin contributes to risk for clinically diagnosed Alzheimer disease. *Neurology*, 71:656-664. (IF 2007: 6.014)
  21. Brouwers, N., Slegers,K., Van Broeckhoven,C. (2008): Molecular genetics of Alzheimer disease: an update. *Annals of Medicine* 40: 562-583 (IF 2007: 5.779)
  22. Ceulemans B, Storm K, Reyniers E, Callewaert L, Martin J-J (2008) Muscle pain as the only presenting symptom in a girl with dystrophinopathy. *Pediatr. Neurol.*, 38(1):64-66. (IF 2007: 1.375)

23. Cruts, M., Van Broeckhoven, C. (2008): Loss of progranulin function in frontotemporal lobar degeneration. *Trends in Genetics* 24(4): 186-194 (IF 2007: 9.729)
24. D'Hulst C., I. Heulens, J.R. Brouwer, R. Willemsen, N. De Geest, S.P. Reeve, P.P. De Deyn, B.A. Hassan, R.F. Kooy (2009). Expression of the GABAergic system in animal models for fragile X syndrome and fragile X associated tremor/ataxia syndrome (FXTAS). *Brain Res.* 1253: 176-183 (IF 2007: 2.218)
25. De Deyn P.P., R. Vanholder, S. Eloot, G. Glorieux. Guanidino compounds as uremic (neuro)toxins. *Seminars in dialysis*. Submitted January 2009 (IF 2007: 2.606)
26. De Ryck A., R. Brouns, M. Geurden, M. Elseviers, P.P. De Deyn, S. Engelborghs. Risicofactoren voor depressie na CVA. Een systematische literatuurstudie. *Tijdschrift voor Geneeskunde*, in press. (geen IF)
27. De Schutter E (2008) Reviewing multi-disciplinary papers: a challenge in neuroscience? *Neuroinformatics*.;6(4):253-5. (IF 2007: 3.750)
28. De Schutter E (2008) Why are computational neuroscience and systems biology so separate? *PLoS Comput Biol.*;4(5):e1000078. (IF 2007: 6.236)
29. De Smet H.J., H. Baillieux, S. Engelborghs, P.F. Paquier, P.P. De Deyn, P. Mariën. Apraxic agraphia: a review of the literature and two new cases. *Cortex*, submitted. (IF 2007: 3.123)
30. De Witte L, Engelborghs S, Verhoeven J, De Deyn PP, Mariën P (2008) Disrupted auto-activation, dysexecutive and confabulating syndrome following bilateral thalamic and right putaminal stroke. *Behav Neurol.*, 19(3):145-51. (IF 2007: 0.762)
31. De Witte L, Verhoeven J, Engelborghs S, De Deyn PP, Mariën P (2008) Crossed aphasia and visuo-spatial neglect following a right thalamic stroke: a case study and review of the literature. *Behav Neurol.*, 19(4):177-94. (IF 2007: 0.762)
32. Debruyne H., M. Van Buggenhout, N. Le Bastard, M. Aries, K. Audenaert, P.P. De Deyn, S. Engelborghs. Is the geriatric depression scale a reliable screening tool for depressive symptoms in elderly patients with cognitive impairment? *Int. J. Geriatr. Psychiatry* 2009 Jan 8; DOI: 10.1002/gps.2154 (IF 2007: 2.197)
33. Debruyne H., M. Van Buggenhout, N. Le Bastard, M. Aries, K. Audenaert, P.P. De Deyn, S. Engelborghs (2009) Is the Geriatric Depression Scale a reliable screening tool for depressive symptoms in elderly patients with cognitive impairment? *International Journal of Geriatric Psychiatry*, 2009 Jan 8. [Epub ahead of print] (IF 2007: 2.197)
34. Deignan JL, Marescau B, Livesay JC, Iyer RK, De Deyn PP, Cederbaum SD, Grody WW (2008) Increased plasma and tissue guanidino compounds in a mouse model of hyperargininemia. *Mol Genet Metab.*;93(2):172-8. (IF 2007: 2.550)
35. Deprez, L., Weckhuysen, S., Peeters, K., Deconinck, T., Claeys, K., Claes, L., Suls, A., Van Dyck, T., Palmieri, A., Matthijs, G., Van Paesschen, W., De Jonghe, P. (2008): Epilepsy as part of the phenotype associated with ATP1A2 mutations. *Epilepsia* 49(3): 500-508 (IF 2007: 3.569)

36. Diener H.C., Sacco R.L., Yusuf S., Cotton D., et al. for the PROFESS Study Group among whom P.P. De Deyn (2008) Effects of aspirin plus extended-release dipyridamole versus clopidogrel and telmisartan on disability and cognitive function after recurrent stroke in patients with ischaemic stroke in the Prevention Regimen for Effectively Avoiding Second Strokes (PROFESS) trial: a double-blind, active and placebo-controlled study. *Lancet Neurol.* 7 (10): 875-884. (IF 2007: 10.169)
37. Dierckx E., S. Engelborghs, R. De Raedt, M. Van Buggenhout, P.P. De Deyn, G. Verleye, D. Verte, I. Ponjaert-Kristoffersen (2008). Differentiation between dementia and depression among older persons: can the difference between actual and premorbid intelligence be useful? *J. Geriatr. Psychiatry Neurol.* 21 (4): 242-249 (IF 2007: 2.279)
38. Dierckx E., S. Engelborghs, R. De Raedt, M. Van Buggenhout, P.P. De Deyn, D. Verté, I. Ponjaert-Kristoffersen. Verbal cued recall as a predictor of conversion to Alzheimer's disease in mild cognitive impairment. *International Journal of Geriatric Psychiatry*, in press. (IF 2007: 2.197)
39. Dierckx E., S. Engelborghs, R. De Raedt, M. Van Buggenhout, P.P. De Deyn, E. D'Haenens, I. Ponjaert-Kristoffersen. The 10-word learning task in the differential diagnosis of early Alzheimer's disease and elderly depression. *Aging, Neuropsychology, and Cognition*, revised. (IF 2007: 0.824)
40. Dierckx, I., Baets, J., Irobi, J., Jacobs, A., De Vriendt, E., Deconinck, T., Merlini, L., Van den Bergh, P., Milic-Rasic, V., Robberecht, W., Fischer, D.F., Juntas Morales, R., Mitrovic, Z., Seeman, P., Mazanec, R., Kochanski, A., Jordanova, A., Auer-Grumbach, M., Helderma-van den Enden, A.T.J.M., Wokke, J.J.H., Nelis, E., De Jonghe, P., Timmerman, V. (2008): Relative contribution of mutations in genes for autosomal dominant distal hereditary motor neuropathies: a genotype - phenotype correlation study. *Brain* 131(Pt 5): 1217-1227 (IF 2007: 8.568)
41. Engelborghs S, de Vreese K, van de Castele T, Vanderstichele H, van Everbroeck B, Cras P, Martin J-J, Vanmechelen E, de Deyn PP (2008) Diagnostic performance of a CSF-biomarker panel in autopsy-confirmed dementia. *Neurobiol. Aging*, 29(8): 1143-1159. (IF 2007: 5.607)
42. Engelborghs S, Vloeberghs E, Le Bastard N, Van Buggenhout M, Mariën P, Somers N, Nagels G, Pickut BA, De Deyn PP (2008) The dopaminergic neurotransmitter system is associated with aggression and agitation in frontotemporal dementia. *Neurochem Int.*, 52(6):1052-60. (IF 2007: 2.975)
43. Errijgers V., E. Franssen, R. D'Hooge, P.P. De Deyn, R.F. Kooy (2008). Effect of genetic background on acoustic startle response in fragile X knockout mice. *Genet. Res.* 90 (4): 341-345 (IF 2007: 2.164)
44. Gallardo, E., Claeys, K.G., Nelis, E., García, A., Canga, A., Combarros, O., Timmerman, V., De Jonghe, P., Berciano, J. (2008): Magnetic resonance imaging findings of leg musculature in Charcot-Marie-Tooth disease type 2 due to dynamin 2 mutation. *Journal of Neurology* 255(7): 986-992 (IF 2007: 2.477)
45. Gebruers N, Truijten S, Engelborghs S, Nagels G, Brouns R, De Deyn PP (2008) Actigraphic measurement of motor deficits in acute ischemic stroke. *Cerebrovasc Dis.*, 26(5):533-40. (IF 2007: 2.534)

46. Gijssels I, Sleegers K, Engelborghs S, Robberecht W, Martin J-J, Vandenberghe R, Sciot R, Dermaut B, Goossens D, van der Zee J, de Pooter T, Del-Favero J, Santens P, De Jonghe P, de Deyn PP, Van Broeckhoven C, Cruts M (2008) Neuronal inclusion protein TDP-43 has no primary genetic role in FTD and ALS. *Neurobiol. Aging*, doi:10.1016/j.neurobiolaging.2007.11.002. (IF 2007: 5.607)
47. Gijssels I., J. van der Zee, S. Engelborghs, D. Goossens, K. Peeters, M. Mattheijssens, E. Corsmit, J. Del-Favero, P.P. De Deyn, C. Van Broeckhoven, M. Cruts (2008). Progranulin locus deletion in frontotemporal dementia. *Hum. Mutat.* 29 (1): 53-58. (IF 2007: 6.273)
48. Gijssels I., Van Broeckhoven C., Cruts M. (2008): Granulin mutations associated with frontotemporal lobar degeneration and related disorders: an update. *Human Mutation* 29(12): 1373-1386 (IF 2007: 6.273)
49. Haugarvoll K., R. Rademakers, J.M. Kachergus, K. Nuytemans, O.A. Ross, J.M. Gibson, E.K. Tan, C. Gaig, E. Tolosa, S. Goldwurm, M. Guidi, G. Riboldazzi, L. Brown, U. Walter, R. Benecke, D. Berg, T. Gasser, J. Theuns, P. Pals, P. Cras, P.P. De Deyn, S. Engelborghs, B. Pickut, R.J. Uitti, T. Foroud, W.C. Nichols, J. Hagenah, C. Klein, A. Samii, C.P. Zabetian, V. Bonifati, C. Van Broeckhoven, M.J. Farrer, Z.K. Wszolek (2008). Lrrk2 R1441C parkinsonism is clinically similar to sporadic Parkinson disease. *Neurology* 70 (16): 1456-1460 (IF 2007: 6.014)
50. Hong S, De Schutter E (2008) Purkinje neurons: What is the signal for complex spikes? *Curr Biol.*;18(20):R969-71. (IF 2007: 10.539)
51. Hulshagen L., O. Krysko, A. Bottelbergs, S. Huyghe, R. Klein, P.P. Van Veldhoven, P.P. De Deyn, R. D'Hooge, D. Hartman, M. Baes (2008). Absence of functional peroxisomes from mouse CNS causes dysmyelination and axon degeneration. *J. Neurosci.* 28 (15): 4015-4027 (IF 2007: 7.490)
52. Irobi J, Krishnan J, de Almeida Souza L, Dierick I, Ceuterick-de Groote C, Van Den Bosch L, Timmermans J-P, Robberecht W, De Jonghe P, Janssens S, Timmerman V. Distal motor neuropathy caused by mutant HSPB8 induces a cell type specific phenotype sparing dividing cells but not postmitotic neuronal cells. *Ingegend.*
53. Koopman K., N. Le Bastard, J.-J. Martin, G. Nagels, P.P. De Deyn, S. Engelborghs. Improved discrimination of Alzheimer's disease (AD) from non-AD dementias using CSF P-tau181P. *Neurochemistry International*, in press. (IF 2007: 2.975)
54. Kumar-Singh, S. (2008): Cerebral amyloid angiopathy: pathogenetic mechanisms and link to dense amyloid plaques. *Genes, Brain and Behavior* 7(Suppl.1): 67-82 (IF 2007: 3.533)
55. Le Bastard N., J.-J. Martin, E. Vanmechelen, H. Vanderstichele, P.P. De Deyn., S. Engelborghs. Added diagnostic value of CSF biomarkers in differential dementia diagnosis. *Neurobiol. Aging* 2009 Jan 14; doi:10.1016/j.neurobiolaging.2008.10.017 (IF 2007: 5.607)
56. Levillain O, Marescau B, Possemiers I, De Deyn PP (2008) Accumulation of methylguanidine and changes in guanidino compound levels in plasma, urine, and kidneys of furosemide-treated rats. *Metabolism.*;57(6):802-10. (IF 2007: 2.647)

57. Mariën P, Baillieux H, De Smet HJ, Engelborghs S, Wilssens I, Paquier P, De Deyn PP (2009) Cognitive, linguistic and affective disturbances following a right superior cerebellar artery infarction: A case study. *Cortex*. 2009 Apr;45(4):527-36. (IF 2007: 3.123)
58. Mariën P, Brouns R, Engelborghs S, Wackenier P, Verhoeven J, Ceulemans B, De Deyn PP (2008) Cerebellar cognitive affective syndrome without global mental retardation in two relatives with Gillespie syndrome. *Cortex.*, 44(1):54-67. (IF 2007: 3.123)
59. Mariën P, Verhoeven J, Wackenier P, Engelborghs S, De Deyn PP (2008) Foreign accent syndrome as a developmental motor speech disorder. *Cortex*. 2008 Nov 21. [Epub ahead of print]. (IF 2007: 3.123)
60. Mayer S.A., N.C. Brun, K. Begtrup, J. Broderick, S. Davis, M.N. Diringer, B.E. Skolnick, T. Steiner; FAST Trial Investigators among whom P.P. De Deyn (2008) Efficacy and safety of recombinant activated factor VII for acute intracerebral hemorrhage. *N. Engl. J. Med.* 358 (20): 2127-37. (IF 2007: 52.589)
61. Monnier N, Marty I, Faure J, Castiglioni C, Desnuelle C, Sacconi S, Estournet B, Ferreira A, Romero N, Laquerrière A, Lazaro L, Martin J-J, Morava E, Rossi A, van der Kooi A, de Visser M, Verschuuren C, Lunardi J (2008) Null mutations causing depletion of the type 1 ryanodine receptor (RYR1) are commonly associated with recessive structural congenital myopathies with cores. *Hum. Mutat.*, 29(5):670-678. (IF 2007: 6.273)
62. Nagels G., M.B. D'hooghe, D. Kos, S. Engelborghs, P.P. De Deyn (2008) Within-session practice effect on paced auditory serial addition test in multiple sclerosis. *Multiple Sclerosis* 14: 106-111. (IF 2007: 3.260)
63. Nuytemans K., P. Pals, K. Sleegers, S. Engelborghs, E. Corsmit, K. Peeters, B. Pickut, M. Mattheijssens, P. Cras, P.P. De Deyn, J. Theuns, C. Van Broeckhoven (2008). Progranulin variability has no major role in Parkinson disease genetic etiology. *Neurology* 71(15):1147-51 (IF 2007: 6.014)
64. Nuytemans K., R. Rademakers, J. Theuns, P. Pals, S. Engelborghs, B. Pickut, T. de Pooter, K. Peeters, M. Mattheijssens, M. Van den Broeck, P. Cras, P.P. De Deyn, C. Van Broeckhoven (2008). Founder mutation p.R1441C in the leucine-rich repeat kinase 2 gene in Belgian Parkinson's disease patients. *Eur. J. Hum. Genet.* 16 (4): 471-479. (IF 2007: 4.003)
65. Oertel W., W. Poewe, E. Wolters, P.P. De Deyn, M. Emre, C. Kirsch, C. Hsu, S. Tekin, R. Lane (2008). Effects of rivastigmine on tremor and other motor symptoms in patients with Parkinson's disease dementia: a retrospective analysis of a double-blind trial and an open-label extension. *Drug Saf.* 31 (1): 79-94. (IF 2007: 3.536)
66. Ramakers, I.H.G.B., Visser, P.J., Aalten, P., Bekers, O., Sleegers, K., Van Broeckhoven, C., Jolles, J., Verhey, F.R.J. (2008): The association between APOE genotype and memory dysfunction in subjects with Mild Cognitive Impairment is related to age and Alzheimer pathology. *Dementia and Geriatric Cognitive Disorders* 26(2): 101-108 (IF 2007: 2.641)
67. Reddel, S., Ouvrier, R., Nicholson, G., Dierick, I., Irobi, J., Timmerman, V., Ryan, M.M. (2008): Autosomal dominant congenital spinal muscular atrophy: A

- possible developmental deficiency of motor neurons? *Neuromuscular Disorders* 18(7): 530-535 (IF 2007: 2.667)
68. Sacco R.L., Diener H.C., Yusuf S., Cotton D; et al. for the PROfESS Study Group among whom P.P. De Deyn (2008) Aspirin and extended-release dipyridamole versus clopidogrel for recurrent stroke. *N. Engl. J. Med.* 359 (12): 1238-1251. (IF 2007: 52.589)
  69. Sare G.M., P.M. Bath, L.J. Gray, T. Moulin, R. Woimant, T. England, C. Geeganage, H. Christensen, P.P. De Deyn, D. Leys, D. O'Neill, E.B. Ringelstein; TAIST Investigators (2009) The relationship between baseline blood pressure and computed tomography finding in acute stroke: data from the tinzaparin in acute ischaemic stroke trial. *Stroke* 40 (1): 41-46. (IF 2007: 6.296)
  70. Sleegers K., K. Bettens, N. Brouwers, S. Engelborghs, H. van Miegroet, P.P. De Deyn, C. Van Broeckhoven (2009). Common variation in GRB-associated Binding Protein 2 (GAB2) and increased risk for Alzheimer dementia. *Hum. Mutat.* 30 (2): E338-E344 (IF 2007: 6.273)
  71. Sleegers K., N. Brouwers, K. Bettens, S. Engelborghs, H. van Miegroet, P.P. De Deyn, C. Van Broeckhoven. No association between CALHM1 and risk for Alzheimer dementia in a Belgian population. *Hum. Mutat.* 2009 Feb 3; DOI: 10.1002/humu.20990 (IF 2007: 6.273)
  72. Sleegers,K., Kumar-Singh,S., Cruts,M., Van Broeckhoven,C.: Molecular pathogenesis of frontotemporal lobar degeneration. *Archives of Neurology* 65(6): 700-704 (2008) (I.F.: 5.783)
  73. Stocchi F., Hersh B.P., Scott B.L., Nausieda P.A., Giorgi L. for the Ease-PD Monotherapy Study Investigators among whom P.P. De Deyn (2008) Ropinirole 24-hour prolonged release and ropinirole immediate release in early Parkinson's disease: a randomized, double-blind, non-inferiority crossover study. *Curr. Med. Res. Opin.* 24 (10): 2883-2895. (IF 2007: 2.962)
  74. Suls,A., Dedeken,P., Goffin,K., Van Esch,H., Dupont,P., Cassiman,D., Kempfle,J., Wuttke,T.V., Weber,Y., Lerche,H., Afawi,Z., Vandenberghe,W., Korczyn,A.D., Berkovic,S.F., Ekstein,D., Kivity,S., Ryvlin,P., Claes,L., Deprez,L., Maljevic,S., Vargas,A., Van Dyck,T., Goossens,D., Del-Favero,J., Van Laere,K., De Jonghe,P., Van Paesschen,W. (2008): Paroxysmal exercise-induced dyskinesia and epilepsy is due to mutations in SLC2A1, encoding the glucose transporter, GLUT1. *Brain* 131(Pt 7): 1831-1844 (IF 2007: 8.568)
  75. Taes YE, Marescau B, De Vriese A, De Deyn PP, Schepers E, Vanholder R, Delanghe JR (2008) Guanidino compounds after creatine supplementation in renal failure patients and their relation to inflammatory status. *Nephrol Dial Transplant.*; 23(4):1330-5. (IF 2007: 3.167)
  76. Theuns,J., Van Broeckhoven,C. (2008):  $\alpha$ -synuclein gene duplications in sporadic Parkinson disease. *Neurology* 70(1): 7-9 (IF 2007: 6.014)
  77. Van Broeck B., G. Vanhoutte, D. Pirici, D. Van Dam, H. Wils, I. Cuijt, K. Vennekens, M. Zabielski, A. Michalik, J. Theuns, P.P. De Deyn, A. Van der Linden, C. Van Broeckhoven, S. Kumar-Singh (2008). Intraneuronal amyloid $\beta$  and reduced brain volume in a novel APPT7141 mouse model for Alzheimer's disease. *Neurobiol. Aging* 29: 241-252. (IF 2007: 5.607)

78. Van Broeck,B., Vanhoutte,G., Cuijt,I., Pereson,S., Joris,G., Timmermans,J-P., Van Der Linden,A., Van Broeckhoven,C., Kumar-Singh,S. (2008): Reduced brain volumes in mice expressing APP-Austrian mutation but not in mice expressing APP-Swedish-Austrian mutations. *Neuroscience Letters* 447: 143-147 (IF 2007: 2.085)
79. Van Dam D, Coen K, De Deyn P (2008) Ibuprofen modifies cognitive disease progression in an Alzheimer's mouse model. *J Psychopharmacol.* 2008 Nov 21. [Epub ahead of print] (IF 2007: 3.782)
80. Van Dam D, Coen K, De Deyn PP (2008) Cognitive evaluation of disease-modifying efficacy of donepezil in the APP23 mouse model for Alzheimer's disease. *Psychopharmacology (Berl.)*;197(1):37-43. (IF 2007: 3.561)
81. van der Zee J., H. Urwin, S. Engelborghs, M. Bruyland, R. Vandenberghe, B. Dermaut, T. De Pooter, K. Peeters, P. Santens, P.P. De Deyn, E.M. Fisher, J. Collinge, A.M. Isaacs, C. Van Broeckhoven (2008) CHMP2B C-truncating mutations in frontotemporal lobar degeneration are associate with an aberrant endosomal phenotype in vitro. *Hum. Mol. Genet.* 17 (2): 313-322. (IF 2007: 7.806)
82. van der Zee,J., Slegers,K., Van Broeckhoven,C.(2008): Invited article: the Alzheimer's disease - frontotemporal lobar degeneration spectrum. *Neurology* 71: 1191-1197 (IF 2007: 6.014)
83. Van Diest D, De Raeve H, Claes J, Parizel PM, De Ridder D, Cras P (2008) Paraneoplastic Opsoclonus-Myoclonus-Ataxia (OMA) syndrome in an adult patient with esthesioneuroblastoma. *J Neurol.* 255(4):594-6. (IF 2007: 2.477)
84. Van Dijck A, Van Dam D, Vergote V, De Spiegeleer B, Luyten W, Schoofs L, De Deyn PP. Central administration of obestatin fails to show inhibitory effects on food and water intake in mice. *Herwerkte versie ingediend by Regulatory Peptides.* (IF 2007: 2.422)
85. Van Dijck A, Vloeberghs E, Van Dam D, Staufenbiel M, De Deyn PP (2008) Evaluation of the APP23-model for Alzheimer's disease in the odour paired-associate test for hippocampus-dependent memory. *Behav Brain Res.*;190(1):147-51. (IF 2007: 2.626)
86. Van Geit W, De Schutter E, Achard P (2008) Automated neuron model optimization techniques: a review. *Biol Cybern.*;99(4-5):241-51. (IF 2007: 1.694)
87. Vandervliet EJ, Verhoeven J, Engelborghs S, De Deyn PP, Parizel PM, Mariën P (2008) FMRI findings in an aphasic patient with reversed cerebral dominance for language. *Acta Neurol Belg.*, 108(4):161-6. (IF 2007: 0.606)
88. Vanholder R., P.P. De Deyn, W. Van Biesen, N. Lameire (2008). Marconi revisited: From kidney to brain – Two organ systems communicating at long distance. *J. Am. Soc. Nephrol.* 19 (7): 1253-1255 (IF 2007: 7.111)
89. Vanholder R., U. Baurmeister, P. Brunet, G. Cohen, G. Glorieux, J. Jankowski, for the European Uremic Toxin Work Group among whom P.P. De Deyn (2008) A bench to bedside view of uremic toxins. *J. Am. Soc. Nephrol.* 19 (5): 863-870. (IF 2007: 7.111)
90. Visser P.J., F.R. Verhey, M. Boada, R. Bullock, P.P. De Deyn, G.B. Frisoni, L. Frolich, H. Hampel, J. Jolles, R. Jones, L. Minthon, F. Nobili, M. Olde Rikkert,

- P.J. Ousset, A.S. Rigaud, P. Scheltens, H. Soininen, L. Spuru, J. Touchon, M. Tsolaki, B. Vellas, L.O. Wahlund, G. Wilcock, B. Winblad; DESCRIPA study group (2008) Development of screening guidelines and clinical criteria for predementia Alzheimer's disease. The DESCRIPA Study. *Neuroepidemiology* 30 (4): 254-265. (IF 2007: 2.203)
91. Vloeberghs E, Coen K, Van Dam D, De Deyn PP (2008) Validation of the APP23 transgenic mouse model of Alzheimer's disease through evaluation of risperidone treatment on aggressive behaviour. *Arzneimittelforschung.*;58(6):265-8. (IF 2007: 0.692)
  92. Vloeberghs E, Van Dam D, Franck F, Serroyen J, Geert M, Staufenbiel M, De Deyn PP (2008) Altered ingestive behavior, weight changes, and intact olfactory sense in an APP overexpression model. *Behav Neurosci.*;122(3):491-7. (IF 2007: 2.883)
  93. Willemse JL, Brouns R, Heylen E, De Deyn PP, Hendriks DF (2008) Carboxypeptidase U (TAFIIa) activity is induced in vivo in ischemic stroke patients receiving thrombolytic therapy. *J Thromb Haemost.* 2008 Jan;6(1):200-2. (IF 2.007: 5.947)
  94. Winblad B., S. Gauthier, L. Scinto, H. Feldman, G.K. Wilcock, L. Truyen, A.J. Mayorga, W. Wang, H.R. Brashear, J.S. Nye; GAL-INT-11/18 Study Group among whom P.P. De Deyn (2008) Safety and efficacy of galantamine in subjects with mild cognitive impairment. *Neurology* 70 (22): 2024-35. (IF 2007: 6.014)
  95. Wostyn P., Audenaert K., De Deyn P.P (2008). An abnormal high trans-lamina cribrosa pressure difference: a missing link between Alzheimer's disease and glaucoma? *Clin. Neurol. Neurosurg.* 110 (7): 753-754 (IF 2007: 1.553)
  96. Wostyn P., K. Audenaert, P.P. De Deyn (2008). Alzheimer's disease-related changes in diseases characterized by elevation of intracranial or intraocular pressure. *Clin. Neurol. Neurosurg.* 110 (2): 101-109. (IF 2007: 1.553)
  97. Wostyn P., K. Audenaert, P.P. De Deyn (2009). The Valsalva maneuver and Alzheimer's disease: is there a link? *Curr. Alzheimer Res.* 6 (1): 59-68 (IF 2007: 3.488)
  98. Yusuf S., Diener H.C., Sacco R.L., Cotton D., et al. for the PROfESS Study Group among whom P.P. De Deyn (2008) Telmisartan to prevent recurrent stroke and cardiovascular events. *N. Engl. J. Med.* 359 (12): 1225-1237. (IF 2007: 52.589)

hoofdstukken in boeken:

Ceuterick-de Groote C, Mole S, Goebel HH, Martin J-J. Chapter section on Adult onset-CLN4, Chapter 10 NCL without genetic assignment in 2nd edition of "The neuronal ceroid lipofuscinoses (Batten disease)". IOS Press Book. SE Mole, HH Goebel, R Williams (eds). – in press.

Engelborghs S., P. Mariën, P.P. De Deyn. Frontal lobe dysfunction across diagnostic dementia categories. In: *Neuropsychology in progress*. P. Mariën, J. Abutalebi (Eds.). London: Psychology Press, in press.