

**PUBLICATIONS OF THE RESEARCH GROUPS OF**

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## Univeriteit Antwerpen (UA)

**Prof. dr. Marc CRUTS and dr. Ilse GIJSELINCK**

**GIJSELINCK, I., VAN MOSSEVELDE, S., VAN DER ZEE, J., SIEBEN A., ENGELBORGHES, S., DE BLEECKER, J., IVANOIU, A., DERYCK, O., EDBAUER, D., ZHANG, M., HEEMAN, B., BÄUMER, V., VAN DEN BROECK, M., MATTHEIJSENS, M., PEETERS, K., ROGAEVA, E., DE JONGHE, P., CRAS, P., MARTIN, J.-J., DE DEYN, P.P., VAN BROECKHOVEN, C., **CRUTS, M.**, BELNEU CONSORTIUM:**

**“The C9orf72 repeat size correlates with onset age of disease, DNA methylation and transcriptional downregulation of the promoter”.**

***Molecular Psychiatry***, Vol. 21, pp. 1112-1124 (2016) Epub: 20-Oct-2015 (PMID: 26481318). **Impact Factor: 13.314.**

BOEYNAEMS, S.\* , BOGAERT, E., MICHIELS, E., **GIJSELINCK, I.**, SIEBEN, A., JOVICIC, A., DE BAETS, G., SCHEVENEELS, W., STEYAERT, J.G., CUIJT, I., VERSTREPEN, K.J., CALLAERTS, P., ROUSSEAU, F., SCHYMKOWITZ, J., **CRUTS, M.**, VAN BROECKHOVEN, C., VAN DAMME, P., GITLER, A.D., ROBBERECHT, W., VAN DEN BOSCH, L. (\* equal contribution):

**“Drosophila screen connects nuclear transport genes to DPR pathology in c9ALS/FTD.”**

***Scientific Reports***, Vol. 6: 20877, pp.1-6 (2016) Epub: 12-Feb-2016 (PMID: 26869068)  
**Impact Factor: 5.228.**

### Articles in Books

**CRUTS, M., VAN BROECKHOVEN, C.:**

**“Genetics of frontotemporal dementia and related disorders”.**

In: Hodges’ Frontotemporal Dementia second edition Edited by Bradford C. Dickerson (Cambridge University Press) (2016)

PHILTJENS, S., VAN MOSSEVELDE, S., WAUTERS, E., VAN DER ZEE, J., VAN LANGENHOVE T., VANDENBULCKE, M., VANDENBERGHE, R., IVANOIU, A., SIEBEN, A., WILLEMS, C., VAN DEN BROECK, M., PEETERS, M., MATTHEIJSENS, M., CRAS, P., DE DEYN, P.P., ENGELBORGHES, S., CRUTS, M., VAN BROECKHOVEN, C.:

**“SORT1 genetic variability and risk for frontotemporal dementia in a Belgina cohort. *Neurology Genetics*”**

**(Under Review)**

PHILTJENS, S., VAN MOSSEVELDE, S., SIEBEN, A., VAN DER ZEE, J., WAUTERS, E., GIJSELINCK, I., ENGELBORGHES, S., VERSIJPT, J., VAN LANGENHOVE, T., CUIJT, I., GEERTS, N., VERSTEVEN, M., MATTHEIJSENS, M., PEETERS, K., VAN DEN BROECK, M., CRAS, P., DE DEYN, P.P., MARTIN, J.J., CRUTS, M., VAN BROECKHOVEN, C.:

**“VPS13C mutations are associated with decreased expression of endogenous protein in frontotemporal dementia”**

**(In Preparation)**

**Prof. dr. Stefanie DEDEURWAERDERE and PhD dr. IDRISH Ali**

HALIMA AMHAOUL, IDRISH ALI, MARCO MOLA, ANNEMIE VAN EETVELDT, KRYSZYNA SZEWCZYK, STEPHAN MISSAULT, KENNY BIELEN, SAMIR-KUMAR SINGH, JASON RECH, BRIAN LORD, MARC CEUSTERS, ANINDYA BHATTACHARYA, STEFANIE DEDEURWAERDERE, 2016,  
**“P2X7 receptor antagonism reduces the severity of spontaneous seizures in a chronic model of temporal lobe epilepsy”**,  
*Neuropharmacology*, Vol. 105; pp. 175-185. **Impact Factor: 5.012**

IDRISH ALI, STEPHANIE BOETS, PIETER JANSSENS, ANNEMIE VAN EETVELDT, HALIMA AMHAOUL, XAVIER LANGLOIS, STEFANIE, DEDEURWAERDERE 2016,  
**“Metabotropic glutamate receptor 2/3 density and its relation to the hippocampal neuropathology in a model of temporal lobe epilepsy”**,  
*Epilepsy Research*, Vol. 127, pp. 55-59. **Impact Factor: 2.367**

**Universiteit Gent**  
**(UGent)**

**Prof. dr. Jan GETTEMANS**

ADRIAAN VERHELLE, WOUTER VAN OVERBEKE, CINDY PELEMAN, REBECCA DE SMET, OLIVIER ZWAENPOEL, TONY LAHOUTTE, JO VAN DORPE, NICK DEVOOGDT, JAN GETTEMANS  
**“Non-Invasive Imaging of Amyloid Deposits in a Mouse Model of AGel Using 99mTc-Modified Nanobodies and SPECT/CT”**  
*Molecular Imaging Biology*., Vol. 18, pp.:887-897. **Impact factor 3,466.**

ADRIAAN VERHELLE AND JAN GETTEMANS  
**“Nanobody-Based Approach to Amyloid Diseases, The Gelsolin Case Study”**  
*Book chapter, Dr. Ana Maria Fernandez-Escamilla* (editor), "Exploring new findings on Amyloidosis". ISBN 978-953-51-2619-5, Print ISBN 978-953-51-2618-8, Published: August 24, 2016. Chapter 13. DOI: 10.5772/63981. Geen impact factor.

**Prof. dr. Geert van LOO & Prof. dr. Rudi BEYAERT**

SLOWICKA, K., VEREECKE, L. and VAN LOO, G. (2016)  
**“Cellular Functions of optineurin in health and disease”**.  
*Trends in Immunology*., Vol. 37, nr. 9, pp.621-633. **Impact Factor: 10.400**

DE WILDE, K., MARTENS, A., LAMBRECHT, S., JACQUES, P., DRENNAN, M.B., DEBUSSCHERE, K., COUDENYS, J. VERHEUGEN, E., WINDELS, F., BEYAERT, R., VAN LOO, G. AND ELEWAUT, D. (2016)  
**“A20 inhibition of STAT1 expression in myeloid cells: a novel endogenous regulatory mechanism preventing development of enthesitis”**.  
*Annals of the Rheumatic Diseases*, Vol. 76, nr.3, pp. 585-592. **Impact Factor: 12.400**

CATRYSSÉ L., FARHANG GHAREMANI, M., YOUSSEF, S.A., MC GUIRE, C., VEREECKE, L., SZE, M., WEBER, A. HEIKENWALDER, M., DE BRUIN, A., BEYAERT, R. AND **VAN LOO, G.** (2016)  
**“A20 prevents chronic liver inflammation and cancer by protecting hepatocytes from death”.**  
*Cell Death and Disease*, Vol. 7, e2250. **Impact Factor: 5.000.**

MAELFAIT, J., ROOSE, K., VEREECKE, L., MC GUIRE, C., SZE, M., SCHUIJS, M.J., WILLART, M., IBAÑEZ, L.I., HAMMAD, H., LAMBRECHT, B.N., BEYAERT, R., SAELENS, X. and **VAN LOO, G.** (2016)  
**“A20 Deficiency in Lung Epithelial Cells Protects against Influenza A Virus Infection”.**  
*PLOS Pathogens*, DOI: 10.1371/journal.ppat, e1005410. **Impact Factor: 7.560.**

SLOWICKA, K., VEREECKE, L., MC GUIRE, C., SZE, M., MAELFAIT, J., KOLPE, A., SAELENS, X., BEYAERT, R. and **VAN LOO, G.** (2016)  
**“Optineurin deficiency in mice is associated with increased sensitivity to *Salmonella* but does not affect proinflammatory NF- $\kappa$ B signaling”.**  
*Eur. J. Immunol.*, Vol. 46, nr.4), pp.971-980. DOI: 10.1002/eji.201545863 **Impact Factor: 4.030**

FUKAYA, M., BRORSSON, C.A., MEYEROVICH, K., CATRYSSÉ L., DELAROCHE, D., VANZELA, E.C., ORTIS, F. BEYAERT, R., NIELSEN, L.B., ANDERSEN, M.L., MORTENSEN, H.B., POCIOT, F., **VAN LOO, G.**, STØRLING, J., and CARDOZO, A.K. (2016)  
**“A20 inhibits  $\beta$  cells apoptosis by multiple mechanisms and predicts residual  $\beta$  cell function in Type 1 diabetes”.**  
*Mol. Endocrinol.*, Vol. 30, nr. 1, pp.48-61. **Impact Factor: 4.000.**

## Université de Liège (ULg)

### Prof. dr. Pierre MAQUET and Dr. Christophe PHILLIPS

VINCENZO MUTO, MATHIEU JASPAR, CHRISTELLE MEYER, CAROLINE KUSSÉ, SARAH I. CHELLAPPA, CHRISTIAN DEGUELDRE, EVELYNE BALTEAU, ANAHITA SHAFFII-LE BOURDIEE, ANDRÉ LUXEN, BENITA MIDDLETON, SIMON N. ARCHER, CHRISTOPHE PHILLIPS, FABIENNE COLLETTE, GILLES VANDEWALLE, DERK-JAN DIJK and PIERRE MAQUET  
**“Local modulation of human brain responses by circadian rhythmicity and sleep debt”.**  
*Sleep Research*, Vol. 353, pp. 687-690. **Impact Factor: 3,259.**

CHRISTELLE MAYER, VINCE NZO MUTO, MATHIEU JASPAR, CAROLINE KUSSÉ, ERIK LAMBOT, SARAH L. CHELLAPPA, CHRISTIAN DEGUELFRE, EVELYNE BALTEAU, ANDRÉ LUXEN, BENITA MIDDLETON, SIMON N. ARCHER, FABIENNE COLLETTE, DERK-JAN DIJK, CHRISTOPHE PHILLIPS, PIERRE MAQUET and GILLES VANDEWALLE.  
**“Seasonality in human cognitive brain responses”.**  
*PNAS*, Vol. nr 13, 11 pp. 3066-3071. [www.pnas.org/cgi/doi/10.1073/pnas1518129113](http://www.pnas.org/cgi/doi/10.1073/pnas1518129113).  
 U.S.A., .113,3066 - 3071 **Impact factor: 9,700.**

JULIEN Q.M. LY, GUILIA CAGGIONI, SARAH L. CHELLAPPA, SOTERIOS PAPACHILLEOS, ALEXANDRE BRZOZOWSKI, CLOÉ BORSU, MARIO ROSANOVA, SIMONE SARASSO, BENITA MIDDLETON, ANDRÉ LUXEN, SIMON N. ARCHER, CHRISTOPHE PHILLIPS, DERK-JAN DIJK, PIERRE MAQUET, MARCELLO MASSIMINI and GILLES VANDEWALLE

**“Circadian regulation of human cortical excitability”.**

***Nature Communications***, DOI : 10.1038/ncomms11828, pp. 1-10. **Impact Factor: 11,329.**

G. ALBOUY *ET AL.*,

**“Cerebral Activity Associated with Transient Sleep-Facilitated Reduction in Motor Memory Vulnerability to Interference”.**

***Scientific Report***, Vol. 6, pp. 34948 (2016). **Impact Factor: 5,222.**

D. C. 'T WALLANT, V. MUTO, G. GAGGIONI, M. JASPAR, S.L. CHELLAPPA, C. MEYER, G. VANDEWALLE, P. MAQUET and C. PHILLIPS.

**“Automatic artifacts and arousals detection in whole-night sleep EEG recordings”.**

***Journal of Neuroscience Methods***. Vol. 258, pp.124–133 (2016).

D. C. 'T WALLANT; P. MAQUET and C. PHILLIPS.,

**“Sleep spindles as an electrographic element: description and automatic detection methods”.**

***Journal Neural Plasticity***. 2016, 1–34 (2016). **Impact Factor: 3,568.**

S. L. CHELLAPPA, G. GAGGIONI, JULIEN Q. M. , S. PAPACHILLEOS, C. BORSU, A. BRZOZOWSKI, M. ROSANOVA, S. SARASSO, A.LUXEN, B. MIDDLETON, S. N. ARCHER, D.JAN DIJK, M. MASSIMINI, P. MAQUET, C. PHILLIPS, R. J. MORAN, & G.VANDEWALLE

**“Circadian dynamics in measures of cortical excitation and inhibition balance”.**

***Scientific Reports***, Vol. 6, pp. 1-13, DOI 10.1038/srep 33661. **Impact Factor: 5,222**

### **Dr. Laurent NGUYEN & Dr Brigitte MALGRANGE**

TIELENS, S.\*, HUYSSEUNE, S.\*, GODIN, J.D., CHARIOT, A., MALGRANGE, B., AND NGUYEN, L .

**“Elongator controls cortical migration by regulating actomyosin dynamics”.**

***Cell Research*** (2016), Vol. 26, pp. 1-18, pp. 1131-1148.

**Impact Factor. 2015= 14.812**

*\* equal contributions*

BORGS, L.\* , PEYRE, E.\* , ALIX, P., HANON, K., GROBARCZYK, B., GODIN, J.D., PURNELLE, A., KRZY, N., MAQUET, P., LEFEBVRE, P.P., SEUTIN, V., MALGRANGE, B.\*, AND NGUYEN, L.\*

**“Dopaminergic neurons differentiating from LRRK2 G2019S induced pluripotent ste cells show early neuritic branching defects”.**

***Nature Sci Rep*** (2016) Sep 19, Vol. 6, pp. 33377. doi: 10.1038/srep33377.

**Impact Factor. 2015= 5.228.**

*\* equal contributions*

MORELLI, G., AVILA, A., RAVANIDIS, S., AOURZ, N., NEVE, R.L., RIGO, J.-M.\* , NGUYEN, L.\* , AND BRÔNE, B\*.

**“Cerebral cortical circuitry formation requires functional glycine receptors”.**

***Cereb Cortex*** (2016), doi: 10.1093/cercor/bhw025.

**Impact Factor : 2015= 8.285.**

*\* equal contributions*

GODIN, J.D., CREPPE, C., LAGUESSE, S., AND NGUYEN, L.

**“Emerging Roles for the Unfolded Protein Response in the Developing Nervous System”.**

*Trends in Neurosciences* (2016), Vol. 39, nr. 6, pp.393-404. doi: 10.1016/j.tins.2016.04.002

**Impact Factor 2015: 13.550.**

## Vrije Universiteit Brussel

### VUB

#### **Prof. dr. Ann MASSIE and Prof dr. Ilse SMOLDERS**

DEMUYSER T, DENEYER L, BENTEA E, ALBERTINI G, VAN LIEFFERINGE J, MERCKX E, DE PRINS A, DE BUNDEL D, MASSIE A, SMOLDERS I (2016)

**“In-depth behavioral characterization of the corticosterone mouse model and the critical involvement of housing conditions”.**

*Physiology & Behavior*, Vol. 156, pp. 199-207. **Impact Factor: 2,341.**

JOERI VAN LIEFFERINGE, EDUARD BENTEA, THOMAS DEMUYSER, GIULIA ALBERTINI, VIRGINIE FOLLIN-ARBELET, SILVIA HOLMSETH, ELLEN MERCKX, HIDEYO SATO, JOERI L. AERTS, ILSE SMOLDERS, LUTGARDE ARCKENS, NIELS C. DANBOLT, and ANN MASSIE

**“Comparative Analysis of Antibodies to xCT (Slc7a11): Forewarned Is Forearmed”**

*Journal of Comparative Neurology*, Vol. 524, pp.1015-1032. **Impact Factor: 3,266**

DEMUYSER T, BENTEA E, DENEYER L, ALBERTINI G, MASSIE A, SMOLDERS I (2016)

**“Disruption of the HPA-axis through corticosterone-release pellets induces robust depressive-like behavior and reduced BDNF levels in mice”.**

*Neuroscience Letters*, Vol. 626, pp. 119-125. **Impact Factor: 2,180.**

BENTEA E, VERBRUGGEN L, MASSIE A (2016)

**“The proteasome inhibition model of Parkinson’s disease.”**

*Journal of Parkinson’s disease*, Vol. 7, pp. 31-63. **Impact Factor: 2,530.**