

Publications in 2018 of research projects with the NBB as co-author

The following list contains publications that arose from research projects in which the NBB's contribution was more substantial than the supply of tissue, but also e.g. intellectual input into study design or specific analyses of tissue or donor data. In these cases the NBB requests corporate coauthorship.

- Byman, E., Schultz, N., Netherlands Brain Bank, Fex, M., & Wennström, M. (2018). Brain alpha-amylase: A novel energy regulator important in Alzheimer disease?: Alpha-amylase, novel energy regulator in brain? *Brain Pathology*. <https://doi.org/10.1111/bpa.12597>
- Dekker, A. D., Vermeiren, Y., Carmona-Iragui, M., Benejam, B., Videla, L., Gelpi, E., ... De Deyn, P. P. (2018). Monoaminergic impairment in Down syndrome with Alzheimer's disease compared to early-onset Alzheimer's disease. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*, 10, 99–111. <https://doi.org/10.1016/j.dadm.2017.11.001>
- Ganz, A. B., Beker, N., Hulsman, M., Sikkes, S., Netherlands Brain Bank, Scheltens, P., ... Holstege, H. (2018). Neuropathology and cognitive performance in self-reported cognitively healthy centenarians. *Acta Neuropathologica Communications*, 6(64). <https://doi.org/10.1186/s40478-018-0558-5>
- Laarman, M. D., Vermunt, M. W., Kleinloog, R., de Boer-Bergsma, J. J., Netherlands Brain Bank, Rinkel, G. J. E., ... Ruigrok, Y. M. (2018). Intracranial Aneurysm–Associated Single-Nucleotide Polymorphisms Alter Regulatory DNA in the Human Circle of Willis. *Stroke*, 49(2), 447–453. <https://doi.org/10.1161/strokeaha.117.018557>
- Schultz, N., Brännström, K., Byman, E., Moussaud, S., Nielsen, H. M., The Netherlands Brain Bank, ... Wennström, M. (2018). Amyloid-beta 1-40 is associated with alterations in NG2+ pericyte population ex vivo and in vitro. *Aging Cell*, 17(3), e12728. <https://doi.org/10.1111/acel.12728>
- Schultz, N., Byman, E., Netherlands Brain Bank, & Wennström, M. (2018). Levels of retinal IAPP are altered in Alzheimer's disease patients and correlate with vascular changes and hippocampal IAPP levels. *Neurobiology of Aging*, 69, 94–101. <https://doi.org/10.1016/j.neurobiolaging.2018.05.003>
- Tiepolt, S., Schäfer, A., Rullmann, M., Roggenhofer, E., Netherlands Brain Bank, Gertz, H.-J., ... Barthel, H. (2018). Quantitative Susceptibility Mapping of Amyloid-β Aggregates in Alzheimer's Disease with 7T MR. *Journal of Alzheimer's Disease*, 64(2), 393–404. <https://doi.org/10.3233/JAD-180118>
- Wong, T. H., Pottier, C., Hondius, D. C., Meeter, L. H. H., van Rooij, J. G. J., Melhem, S., ... van Swieten, J. C. (2018). Three VCP Mutations in Patients with Frontotemporal Dementia. *Journal of Alzheimer's Disease*, 65(4), 1139–1146. <https://doi.org/10.3233/JAD-180301>

All publications in 2018

The following list contains publications that were realized through the use of NBB tissue. The NBB is acknowledged in these articles, but is not included as a co-author.

- Aberg, K. A., Dean, B., Shabalin, A. A., Chan, R. F., Han, L. K. M., Zhao, M., ... van den Oord, E. J. C. G. (2018). Methylome-wide association findings for major depressive disorder overlap in blood and

- brain and replicate in independent brain samples. *Molecular Psychiatry*.
<https://doi.org/10.1038/s41380-018-0247-6>
- Adams, S. L., Benayoun, L., Tilton, K., Mellott, T. J., Seshadri, S., Blusztajn, J. K., & Delalle, I. (2018). Immunohistochemical Analysis of Activin Receptor-Like Kinase 1 (ACVRL1/ALK1) Expression in the Rat and Human Hippocampus: Decline in CA3 During Progression of Alzheimer's Disease. *Journal of Alzheimer's Disease*, 63(4), 1433–1443. <https://doi.org/10.3233/JAD-171065>
- Aguila, J., Cheng, S., Kee, N., Cao, M., Deng, Q., & Hedlund, E. (2018). *Spatial transcriptomics and in silico random pooling identify novel dopamine neuron subtype markers*.
<https://doi.org/10.1101/334417>
- Allodi, I., Nijssen, J., Aguila Benitez, J. C., Bonvicini, G., Cao, M., & Hedlund, E. (2018). *Modeling motor neuron resilience in ALS using stem cells*. <https://doi.org/10.1101/399659>
- Alonso, R., Fernández-Fernández, A. M., Pisa, D., & Carrasco, L. (2018). Multiple sclerosis and mixed microbial infections. Direct identification of fungi and bacteria in nervous tissue. *Neurobiology of Disease*, 117, 42–61. <https://doi.org/10.1016/j.nbd.2018.05.022>
- Alonso, R., Pisa, D., Fernández-Fernández, A. M., & Carrasco, L. (2018). Infection of Fungi and Bacteria in Brain Tissue From Elderly Persons and Patients With Alzheimer's Disease. *Frontiers in Aging Neuroscience*, 10. <https://doi.org/10.3389/fnagi.2018.00159>
- Anwer, M., Bolkvadze, T., Ndode-Ekane, X. E., Puhakka, N., Rauramaa, T., Leinonen, V., ... Pitkänen, A. (2018). Sushi repeat-containing protein X-linked 2: A novel phylogenetically conserved hypothalamo-pituitary protein. *Journal of Comparative Neurology*, 526(11), 1806–1819. <https://doi.org/10.1002/cne.24449>
- Apetri, A., Crespo, R., Juraszek, J., Pascual, G., Janson, R., Zhu, X., ... Goudsmit, J. (2018). A common antigenic motif recognized by naturally occurring human VH5–51/VL4–1 anti-tau antibodies with distinct functionalities. *Acta Neuropathologica Communications*, 6(1), 43. <https://doi.org/10.1186/s40478-018-0543-z>
- Berrocal, M., Corbacho, I., Gutierrez-Merino, C., & Mata, A. M. (2018). Methylene blue activates the PMCA activity and cross-interacts with amyloid β-peptide, blocking Aβ-mediated PMCA inhibition. *Neuropharmacology*, 139, 163–172. <https://doi.org/10.1016/j.neuropharm.2018.07.012>
- Bogie, J. F., Boelen, E., Louagie, E., Delputte, P., Elewaut, D., van Horssen, J., ... Hellings, N. (2018). CD169 is a marker for highly pathogenic phagocytes in multiple sclerosis. *Multiple Sclerosis Journal*, 24(3), 290–300. <https://doi.org/10.1177/1352458517698759>
- Boon, B. D. C., Hoozemans, J. J. M., Lopuhaä, B., Eigenhuis, K. N., Scheitens, P., Kamphorst, W., ... Bouwman, F. H. (2018). Neuroinflammation is increased in the parietal cortex of atypical Alzheimer's disease. *Journal of Neuroinflammation*, 15(1), 170. <https://doi.org/10.1186/s12974-018-1180-y>
- Borreca, A., Latina, V., Corsetti, V., Middei, S., Piccinin, S., Della Valle, F., ... Amadoro, G. (2018). AD-Related N-Terminal Truncated Tau Is Sufficient to Recapitulate In Vivo the Early Perturbations of Human Neuropathology: Implications for Immunotherapy. *Molecular Neurobiology*, 55(10), 8124–8153. <https://doi.org/10.1007/s12035-018-0974-3>

Publications 2018

- Breuer, J., Korpos, E., Hannocks, M.-J., Schneider-Hohendorf, T., Song, J., Zondler, L., ... Schwab, N. (2018). Blockade of MCAM/CD146 impedes CNS infiltration of T cells over the choroid plexus. *Journal of Neuroinflammation*, 15(1), 236. <https://doi.org/10.1186/s12974-018-1276-4>
- Bridel, C., Koel-Simmelink, M. J. A., Peferoen, L., Troletti, C. D., Durieux, S., Gorter, R., ... Teunissen, C. E. (2018). Brain endothelial cell expression of SPARCL-1 is specific to chronic multiple sclerosis lesions and is regulated by inflammatory mediators in vitro. *Neuropathology and Applied Neurobiology*, 44(4), 404–416. <https://doi.org/10.1111/nan.12412>
- Brinks, J., Dijk, E. H. C. van, Habeeb, M., Nikolaou, A., Tsionaka, R., Peters, H. A. B., ... Boon, C. J. F. (2018). The Effect of Corticosteroids on Human Choroidal Endothelial Cells: A Model to Study Central Serous Chorioretinopathy. *Investigative Ophthalmology & Visual Science*, 59(13), 5682–5692. <https://doi.org/10.1167/iovs.18-25054>
- Bulk, M., Abdelmoula, W. M., Nabuurs, R. J. A., van der Graaf, L. M., Mulders, C. W. H., Mulder, A. A., ... van der Weerd, L. (2018). Postmortem MRI and histology demonstrate differential iron accumulation and cortical myelin organization in early- and late-onset Alzheimer's disease. *Neurobiology of Aging*, 62, 231–242. <https://doi.org/10.1016/j.neurobiolaging.2017.10.017>
- Bulk, M., Kenkhuis, B., van der Graaf, L. M., Goeman, J. J., Natté, R., & van der Weerd, L. (2018). Postmortem T 2 *- Weighted MRI Imaging of Cortical Iron Reflects Severity of Alzheimer's Disease. *Journal of Alzheimer's Disease*, 65(4), 1125–1137. <https://doi.org/10.3233/JAD-180317>
- Bulk, M., Weerd, L. van der, Breimer, W., Lebedev, N., Webb, A., Goeman, J. J., ... Bossoni, L. (2018). Quantitative comparison of different iron forms in the temporal cortex of Alzheimer patients and control subjects. *Scientific Reports*, 8(1), 6898. <https://doi.org/10.1038/s41598-018-25021-7>
- Cao, K., Dong, Y.-T., Xiang, J., Xu, Y., Hong, W., Song, H., & Guan, Z.-Z. (2018). Reduced expression of SIRT1 and SOD-1 and the correlation between these levels in various regions of the brains of patients with Alzheimer's disease. *Journal of Clinical Pathology*, 71(12), 1090–1099. <https://doi.org/10.1136/jclinpath-2018-205320>
- Chan, R. F., Turecki, G., Shabalina, A. A., Guintivano, J., Zhao, M., Xie, L. Y., ... Oord, E. J. C. G. van den. (2018). Cell-type-specific methylome-wide association studies implicate neurodegenerative processes and neuroimmune communication in major depressive disorder. *BioRxiv*, 432088. <https://doi.org/10.1101/432088>
- Charisiadis, P., Andrianou, X. D., van der Meer, T. P., den Dunnen, W. F. A., Swaab, D. F., Wolffenbuttel, B. H. R., ... van Vliet-Ostaptchouk, J. V. (2018). Possible Obesogenic Effects of Bisphenols Accumulation in the Human Brain. *Scientific Reports*, 8(1), 8186. <https://doi.org/10.1038/s41598-018-26498-y>
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- Cid-Samper, F., Gelabert-Baldrich, M., Lang, B., Lorenzo-Gotor, N., Ponti, R. D., Severijnen, L.-A. W. F. M., ... Tartaglia, G. G. (2018). An Integrative Study of Protein-RNA Condensates Identifies

- Scaffolding RNAs and Reveals Players in Fragile X-Associated Tremor/Ataxia Syndrome. *Cell Reports*, 25(12), 3422–3434.e7. <https://doi.org/10.1016/j.celrep.2018.11.076>
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- den Haan, J., Morrema, T. H. J., Rozemuller, A. J., Bouwman, F. H., & Hoozemans, J. J. M. (2018). Different curcumin forms selectively bind fibrillar amyloid beta in post mortem Alzheimer's disease brains: Implications for in-vivo diagnostics. *Acta Neuropathologica Communications*, 6(1), 75. <https://doi.org/10.1186/s40478-018-0577-2>
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<https://doi.org/10.3389/fnagi.2018.00102>
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- Hüttenrauch, M., Ogorek, I., Klafki, H., Otto, M., Stadelmann, C., Weggen, S., ... Wirths, O. (2018). Glycoprotein NMB: A novel Alzheimer's disease associated marker expressed in a subset of activated microglia. *Acta Neuropathologica Communications*, 6(1), 108.
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Publications 2018

- Mahul-Mellier, A.-L., Altay, M. F., Burtscher, J., Maharjan, N., Ait-Bouziad, N., Chiki, A., ... Lashuel, H. A. (2018). The making of a Lewy body: The role of α -synuclein post-fibrillization modifications in regulating the formation and the maturation of pathological inclusions. *BioRxiv*, 500058. <https://doi.org/10.1101/500058>
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