

## Scientific publications (mentioning the Neuro-CEB Brainbank)

### Publications scientifiques (citant le Neuro-CEB)

#### **2021**

- 1) Chambraud B, Daguinot C, Guillemeau K, Genet M, Dounane O, Meduri G, Poüs C, Baulieu EE, Giustiniani J. Decrease of neuronal FKBP4/FKBP52 modulates perinuclear lysosomal positioning and MAPT/Tau behavior during MAPT/Tau-induced proteotoxic stress. *Autophagy*. 2021 Jan 25;1-20.
- 2) Fenyi A, Duyckaerts C, Bousset L, Braak H, Del Tredici K, Melki R, On Behalf Of The Brainbank Neuro-Ceb Neuropathology Network. Seeding Propensity and Characteristics of Pathogenic αSyn Assemblies in Formalin-Fixed Human Tissue from the Enteric Nervous System, Olfactory Bulb, and Brainstem in Cases Staged for Parkinson's Disease. *Cells*. 2021 Jan 12;10(1):139.
- 3) Valverde A, Dunys J, Lorivel T, Debayle D, Gay AS, Lacas-Gervais S, Roques BP, Chami M, Checler F. Aminopeptidase A contributes to biochemical, anatomical and cognitive defects in Alzheimer's disease (AD) mouse model and is increased at early stage in sporadic AD brain. *Acta Neuropathol*. 2021 Apr 21.
- 4) Teyssou E, Muratet F, Amador MD, Ferrien M, Lautrette G, Machat S, Boillée S, Larmonier T, Saker S, Leguern E, Cazeneuve C, Marie Y, Guegan J, Gyorgy B, Cintas P, Meininger V, Le Forestier N, Salachas F, Couratier P, Camu W, Seilhean D, Millecamps S. Genetic screening of ANXA11 revealed novel mutations linked to amyotrophic lateral sclerosis. *Neurobiol Aging*. 2021 Mar;99:102.e11-102.e20.
- 5) Muratet F, Teyssou E, Chiot A, Boillée S, Lobsiger CS, Bohl D, Gyorgy B, Guegan J, Marie Y, Amador MDM, Salachas F, Meininger V, Bernard E, Antoine JC, Camdessanché JP, Camu W, Cazeneuve C, Fauret-Amsellem AL, Leguern E, Mouzat K, Guissart C, Lumbroso S, Corcia P, Vourc'h P, Grappéron AM, Attarian S, Verschueren A, Seilhean D, Millecamps S. Impact of a frequent nearsplice SOD1 variant in amyotrophic lateral sclerosis: optimising SOD1 genetic screening for gene therapy opportunities. *J Neurol Neurosurg Psychiatry*. 2021 Mar 30:jnnp-2020-325921.

#### **2020**

- 6) Ando K, De Decker R, Vergara C, Yilmaz Z, Mansour S, Suain V, Sleegers K, de Fisenne MA, Houben S, Potier MC, Duyckaerts C, Watanabe T, Buée L, Leroy K, Brion JP. Picamal reduction exacerbates tau pathology in a murine tauopathy model. *Acta Neuropathol*. 2020 Jan 10.
- 7) Orme T, Hernandez D, Ross OA, Kun-Rodrigues C, Darwent L, Shepherd CE, Parkkinen L, Ansorge O, Clark L, Honig LS, Marder K, Lemstra A, Rogaeva E, St George-Hyslop P, Londos E, Zetterberg H, Morgan K, Troakes C, Al-Sarraj S, Lashley T, Holton J, Compta Y, Van Deerlin V, Trojanowski JQ, Serrano GE, Beach TG, Lesage S, Galasko D, Masliah E, Santana I, Pastor P, Tienari PJ, Myllykangas L, Oinas M, Revesz T, Lees A, Boeve BF, Petersen RC, Ferman TJ, Escott-Price V, Graff-Radford N, Cairns NJ, Morris JC, Pickering-Brown S, Mann D, Halliday G, Stone DJ, Dickson DW, Hardy J, Singleton A, Guerreiro R, Bras J. Analysis of neurodegenerative disease-causing genes in dementia with Lewy bodies. *Acta Neuropathol Commun*. 2020 Jan 29;8(1):5.
- 8) Schueller E, Paiva I, Blanc F, Wang XL, Cassel JC, Boutillier AL, Bousiges O. Dysregulation of histone acetylation pathways in hippocampus and frontal cortex of Alzheimer's disease patients. *Eur Neuropsychopharmacol*. 2020 Feb 11.
- 9) Kunie Ando,<sup>1,2,3</sup> Marième Ndjam,<sup>3</sup> Sabrina Turbant,<sup>2,3</sup> Gaëlle Fontaine,<sup>3</sup> Gustavo Pregoni,<sup>3</sup> Luce Dauphinot,<sup>3</sup> Zehra Yilmaz,<sup>1</sup> Valérie Suain,<sup>1</sup> Salwa Mansour,<sup>1</sup> Michèle Authelet,<sup>1</sup> Robert De Dekker,<sup>1</sup> Karelle Leroy,<sup>1</sup> Benoît Delatour,<sup>3</sup> Brain Bank NeuroCEB Neuropathology Network, Charles Duyckaerts,<sup>2,3</sup> Marie-Claude Potier,<sup>#3</sup> and Jean-Pierre Brion. The lipid phosphatase Synaptosomal 1 undergoes a significant alteration in expression and solubility and is associated with brain lesions in Alzheimer's disease. *Acta Neuropathol Commun*. 2020 Jun 3;8(1):79.

- 10) Verma A, Ray A, Bapat D, Diwakar L, Kommandi RP, Schneider BL, Hirsch EC, Ravindranath V. Glutaredoxin 1 Downregulation in the Substantia Nigra Leads to Dopaminergic Degeneration in Mice. *Mov Disord.* 2020 Oct;35(10):1843-1853.
- 11) Soria FN, Paviolo C, Doudnikoff E, Arotcarena ML, Lee A, Danné N, Mandal AK, Gosset P, Dehay B, Groc L, Cognet L, Bezard E. Synucleinopathy alters nanoscale organization and diffusion in the brain extracellular space through hyaluronan remodeling. *Nat Commun.* 2020 Jul 10;11(1):3440.
- 12) Bertoux M, Cassagnaud P, Lebouvier T, Lebert F, Sarazin M, Le Ber I, Dubois B; NeuroCEB Brain Bank, Auriaccombe S, Hannequin D, Wallon D, Ceccaldi M, Maurage CA, Deramecourt V, Pasquier F. Does amnesia specifically predict Alzheimer's pathology? A neuropathological study. *Neurobiol Aging.* 2020 Nov;95:123-130.
- 13) Maharjan N, Saxena S. It Takes Two to Tango: DPRs in ALS and SCA36. *Neuron.* 2020 Jul 22;107(2):202-204.
- 14) Roux T, Barbier M, Papin M, Davoine CS, Sayah S, Coarelli G, Charles P, Marelli C, Parodi L, Tranchant C, Goizet C, Klebe S, Lohmann E, Van Maldergem L, van Broeckhoven C, Coutelier M, Tesson C, Stevanin G, Duyckaerts C, Brice A, Durr A; SPATAK network. Clinical, neuropathological, and genetic characterization of STUB1 variants in cerebellar ataxias: a frequent cause of predominant cognitive impairment. *Genet Med.* 2020 Nov;22(11):1851-1862.
- 15) Kilinc D, Vreux AC, Mendes T, Flraig A, Marques-Coelho D, Verschoore M, Demiautte F, Amouyel P; Neuro-CEB Brain Bank, Eysert F, Dourlen P, Chapuis J, Costa MR, Malmanche N, Checler F, Lambert JC. Pyk2 overexpression in postsynaptic neurons blocks amyloid  $\beta$ -induced synaptotoxicity in microfluidic co-cultures. *Brain Commun.* 2020 Aug 28;2(2):fcaa139.
- 16) Vaillant-Beuchot L, Mary A, Pardossi-Piquard R, Bourgeois A, Lauritzen I, Eysert F, Kinoshita PF, Cazareth J, Badot C, Fragaki K, Bussiere R, Martin C, Mary R, Bauer C, Pagnotta S, Paquis-Flucklinger V, Buée-Scherrer V, Buée L, Lacas-Gervais S, Checler F, Chami M. Accumulation of amyloid precursor protein C-terminal fragments triggers mitochondrial structure, function, and mitophagy defects in Alzheimer's disease models and human brains. *Acta Neuropathol.* 2021 Jan;141(1):39-65.
- 17) Laferrière F, He X, Zinghirino F, Doudnikoff E, Faggiani E, Meissner WG, Bezard E, De Giorgi F, Ichas F. Overexpression of  $\alpha$ -Synuclein by Oligodendrocytes in Transgenic Mice Does Not Recapitulate the Fibrillar Aggregation Seen in Multiple System Atrophy. *Cells.* 2020 Oct 29;9(11):2371.
- 18) Mora P, Hollier PL, Guimbal S, Abelanet A, Diop A, Cornuault L, Couffinhal T, Horng S, Gadeau AP, Renault MA, Chapouly C. Blood-brain barrier genetic disruption leads to protective barrier formation at the Glia Limitans. *PLoS Biol.* 2020 Nov 30;18(11):e3000946.
- 19) Hérard AS, Petit F, Gary C, Guillermier M, Boluda S, Garin CM; Brainbank Neuro-CEB Neuropathology Network, Lam S, Dhenain M. Induction of amyloid- $\beta$  deposits from serially transmitted, histologically silent, A $\beta$  seeds issued from human brains. *Acta Neuropathol Commun.* 2020 Nov 30;8(1):205.
- 20) Chiot A, Zaïdi S, Iltis C, Ribon M, Berriat F, Schiaffino L, Jolly A, de la Grange P, Mallat M, Bohl D, Millecamp S, Seilhean D, Lobsiger CS, Boillée S. Modifying macrophages at the periphery has the capacity to change microglial reactivity and to extend ALS survival. *Nat Neurosci.* 2020 Nov;23(11):1339-1351.

## 2019

- 21) Martin E, Amar M, Dalle C, Youssef I, Boucher C, Le Duigou C, Brückner M, Prigent A, Sazdovitch V, Halle A, Kanellopoulos JM, Fontaine B, Delatour B, Delarasse C. New role of P2X7 receptor in an Alzheimer's disease mouse model. *Mol Psychiatry.* 2019 Jan;24(1):108-125.

- 22) Arotcarena ML, Bourdenx M, Dutheil N, Thiolat ML, Doudnikoff E, Dovero S, Ballabio A, Fernagut PO, Meissner WG, Bezard E, Dehay B. Transcription factor EB overexpression prevents neurodegeneration in experimental synucleinopathies. *JCI Insight*. 2019 Aug 22;4(16). pii: 129719.
- 23) Gary C, Lam S, Hérard AS, Koch JE, Petit F, Gipchtein P, Sawiak SJ, Caillierez R, Eddarkaoui S, Colin M, Aujard F, Deslys JP; French Neuropathology Network, Brouillet E, Buée L, Comoy EE, Pifferi F, Picq JL, Dhenain M. Encephalopathy induced by Alzheimer brain inoculation in a non-human primate. *Acta Neuropathol Commun*. 2019 Sep 4;7(1):126.
- 24) Souchet B, Audrain M, Billard JM, Dairou J, Fol R, Orefice NS, Tada S, Gu Y, Dufayet-Chaffaud G, Limantow E, Carreaux F, Bazureau JP, Alves S, Meijer L, Janel N, Braudeau J, Cartier N. Inhibition of DYRK1A proteolysis modifies its kinase specificity and rescues Alzheimer phenotype in APP/PS1 mice. *Acta Neuropathol Commun*. 2019 Mar 18;7(1):46.
- 25) Mouchard A, Boutonnet MC, Mazzocco C, Biendon N, Macrez N; Neuro-CEB Neuropathology Network. ApoE-fragment/A $\beta$  heteromers in the brain of patients with Alzheimer's disease. *Sci Rep*. 2019 Mar 8;9(1):3989.
- 26) Rajani RM, Ratelade J, Domenga-Denier V, Hase Y, Kalimo H, Kalaria RN, Joutel A. Blood brain barrier leakage is not a consistent feature of white matter lesions in CADASIL. *Acta Neuropathol Commun*. 2019 Nov 21;7(1):187.
- 27) Riku Y, Duyckaerts C, Boluda S, Plu I, Le Ber I, Millecamp S, Salachas F; Brainbank NeuroCEB Neuropathology Network, Yoshida M, Ando T, Katsuno M, Sobue G, Seilhean D. Increased prevalence of granulovacuolar degeneration in C9orf72 mutation. *Acta Neuropathol*. 2019 Nov;138(5):783-793.
- 28) Bussiere R, Oulès B, Mary A, Vaillant-Beuchot L, Martin C, El Manaa W, Vallée D, Duplan E, Paterlini-Bréchot P, Alves Da Costa C, Checler F, Chami M. Upregulation of the Sarco-Endoplasmic Reticulum Calcium ATPase 1 Truncated Isoform Plays a Pathogenic Role in Alzheimer's Disease. *Cells*. 2019 Nov 28;8(12).
- 29) Thierry M, Boluda S, Delatour B, Marty S, Seilhean D; Brainbank Neuro-CEB Neuropathology Network, Potier MC, Duyckaerts C. Human subiculo-fornico-mamillary system in Alzheimer's disease: Tau seeding by the pillar of the fornix. *Acta Neuropathol*. 2019 Dec 10.
- 30) Carvalho K, Faivre E, Pietrowski MJ, Marques X, Gomez-Murcia V, Deleau A, Huin V, Hansen JN, Kozlov S, Danis C, Temido-Ferreira M, Coelho JE, Mériaux C, Eddarkaoui S, Gras SL, Dumoulin M, Cellai L; NeuroCEB Brain Bank, Landrieu I, Chern Y, Hamdane M, Buée L, Boutillier AL, Levi S, Halle A, Lopes LV, Blum D. Exacerbation of C1q dysregulation, synaptic loss and memory deficits in tau pathology linked to neuronal adenosine A2A receptor. *Brain*. 2019 Nov 1;142(11):3636-3654.
- 31) Maatouk L, Yi C, Carrillo-de Sauvage MA, Compagnion AC, Hunot S, Ezan P, Hirsch EC, Koulakoff A, Pfrieger FW, Tronche F, Leybaert L, Giaume C, Vyas S. Glucocorticoid receptor in astrocytes regulates midbrain dopamine neurodegeneration through connexin hemichannel activity. *Cell Death Differ*. 2019 Mar;26(3):580-596.

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- 33) Hervé D, Porché M, Cabrejo L, Guidoux C, Tournier-Lasserve E, Nicolas G, Adle-Biassette H, Plu I, Chabriat H, Duyckaerts C. Fatal A $\beta$  cerebral amyloid angiopathy 4 decades after a dural graft at the age of 2 years. *Acta Neuropathol*. 2018 May;135(5):801-803.
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- 36) Pihlstrøm L, Schottlaender L, Chelban V; MSA Exome Consortium, Meissner WG, Federoff M, Singleton A, Houlden H. Lysosomal storage disorder gene variants in multiple system atrophy. *Brain.* 2018 Jul 1;141(7):e53.
- 37) Castrec B, Dian C, Ciccone S, Ebert CL, Bienvenut WV, Le Caer JP, Steyaert JM, Giglione C, Meinnel T. Structural and genomic decoding of human and plant myristoylomes reveals a definitive recognition pattern. *Nat Chem Biol.* 2018 Jul;14(7):671-679.
- 38) Viodé A, Fournier C, Camuzat A, Fenaille F; NeuroCEB Brain Bank, Latouche M, Elahi F, Le Ber I, Junot C, Lamari F, Anquetil V, Becher F. New Antibody-Free Mass Spectrometry-Based Quantification Reveals That C9ORF72 Long Protein Isoform Is Reduced in the Frontal Cortex of Hexanucleotide-Repeat Expansion Carriers. *Front Neurosci.* 2018 Aug 28;12:589.
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- 40) Fournier C, Anquetil V, Camuzat A, Stirati-Buron S, Sazdovitch V, Molina-Porcel L, Turbant S, Rinaldi D, Sánchez-Valle R, Barbier M, Latouche M; Neuro-CEB Neuropathology Network, Stevanin G, Seilhean D, Brice A, Duyckaerts C, Le Ber I. Interrupted CAG expansions in ATXN2 gene expand the genetic spectrum of frontotemporal dementias. *Acta Neuropathol Commun.* 2018 May 30;6(1):41.

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