



Cover image: 'Discrete class I molecules on brain endothelium differentially regulate neuropathology in experimental cerebral malaria' by Fain et al. Images are brains of mice infected with *Plasmodium berghei* ANKA. FITC-albumin (green) was administered IV to highlight the blood vessels of the brain of regions of vascular leakage. DAPI (blue) was used for morphology and anatomical location. Only the brain sufficient for class I molecule develops the extreme pathology of cerebral malaria. *Brain*. 2024; 147(2):566-589.

Contents

Editorial

Was Broca wrong?

M. Husain

325

Essay

The historical context of migraine stigma

W. Young

327

Scientific Commentaries

Are we entering the 'Tau-lemaic' era of Parkinson's disease?

A. J. Espay and A. J. Lees

330

Transcriptomics reveals CSF cellular composition in multiple sclerosis but detects no viral RNA

N. Schwab

333

Pore-forming neurons: a new paradigm of pyroptotic cell death in HIV-associated neurocognitive disorder

P. Periyasamy and S. Buch

335

Review Articles

Neuromelanin-sensitive MRI as a promising biomarker of catecholamine function

P. Trujillo, M. A. Aumann and D. O. Claassen

337

White matter tracts and executive functions: a review of causal and correlation evidence

M. Ribeiro, Y. N. Yordanova, V. Noblet, G. Herbet and D. Ricard

352

Extracellular vesicles set the stage for brain plasticity and recovery by multimodal signalling

D. M. Hermann, L. Peruzzotti-Jametti, B. Giebel and S. Pluchino

372

Subcortical contributions to the sense of body ownership

L. Crucianelli, A. T. Reader and H. H. Ehrsson

390



Report

On the origin of F-wave: involvement of central synaptic mechanisms

M. G. Özyurt, F. Nascimento, R. M. Brownstone and M. Beato

406

Original Articles

Autosomal dominant in cis D4Z4 repeat array duplication alleles in facioscapulohumeral dystrophy

R. J. L. F. Lemmers, R. Butterfield, P. J. van der Vliet, J. L. de Bleecker, L. van der Pol, D. M. Dunn, C. E. Erasmus, M. D'Hooghe, K. Verhoeven, J. Balog, A. Bigot, B. van Engelen, J. Statland, E. Bugiardini, N. van der Stoep, T. Evangelista, C. Marini-Bettolo, P. van den Bergh, R. Tawil, N. C. Voermans, J. Vissing, R. B. Weiss and S. M. van der Maarel

414

MerTK is a mediator of alpha-synuclein fibril uptake by human microglia

M.-F. Dorion, M. Yaqubi, K. Senkevich, N. W. Kieran, A. MacDonald, C. X.-Q. Chen, W. Luo, A. Wallis, I. Shlaifer, J. A. Hall, R. W. R. Dudley, I. A. Glass, Birth Defects Research Laboratory, J. A. Stratton, E. A. Fon, T. Bartels, J. P. Antel, Z. Gan-or, T. M. Durcan and L. M. Healy

427

Nigrostriatal tau pathology in parkinsonism and Parkinson's disease

Y. Chu, W. D. Hirst, H. J. Federoff, A. S. Harms, A. J. Stoessl and J. H. Kordower

444

Abnormal higher-order network interactions in Parkinson's disease visual hallucinations

J. B. Tan, E. J. Müller, I. F. Orlando, N. L. Taylor, D. S. Margulies, J. Szeto, S. J. G. Lewis, J. M. Shine and C. O'Callaghan

458

Motivational and cognitive predictors of apathy after subthalamic nucleus stimulation in Parkinson's disease

M. Béreau, A. Kibleur, M. Servant, G. Clément, K. Dujardin, A.-S. Rolland, T. Wirth, O. Lagha-Boukbiza, J. Voirin, M. des N. Santin, E. Hainque, D. Grabli, A. Comte, S. Drapier, F. Durif, A. Marques, A. Eusebio, J.-P. Azulay, C. Giordana, J.-L. Houeto, B. Jarraya, D. Maltete, O. Rascol, T. Rouaud, M. Tir, C. Moreau, T. Danaila, S. Prange, L. Tatu, C. Tranchant, J.-C. Corvol, D. Devos, S. Thobois, M. Desmarests and M. Anheim, for the Predistim Study Group

472

Widespread alternative splicing dysregulation occurs presymptomatically in CAG expansion spinocerebellar ataxias

H. K. Shorrock, C. D. Lennon, A. Aliyeva, E. E. Davey, C. C. DeMeo, C. E. Pritchard, L. Planco, J. M. Velez, A. Mascorro-Huamancaja, D. S. Shin, J. D. Cleary and J. A. Berglund

486

On-demand low-frequency stimulation for seizure control: efficacy and behavioural implications

E. Paschen, P. Kleis, D. M. Vieira, K. Heining, C. Boehler, U. Egert, U. Häussler and C. A. Haas

505

Closed-loop stimulation in periods with less epileptiform activity drives improved epilepsy outcomes

D. N. Anderson, C. M. Charlebois, E. H. Smith, T. S. Davis, A. Y. Peters, B. J. Newman, A. M. Arain, K. S. Wilcox, C. R. Butson and J. D. Rolston

521

Epilepsy in childhood and school performance: a nation-wide cohort study

J. W. Dreier, B. B. Trabjerg, O. Plana-Ripoll, N. Skipper, E. Agerbo, C. Cotsapas, A. T. Berg and J. Christensen

532

Anti-seizure gene therapy for focal cortical dysplasia

A. Almacellas Barbanjo, R. T. Graham, B. Maffei, J. C. Carpenter, M. Leite, J. Hoke, F. Hardjo, J. Scott-Solache, C. Chimonides, S. Schorge, D. M. Kullmann, V. Magloire and G. Lignani

542

Expression profiling of cerebrospinal fluid identifies dysregulated antiviral mechanisms in multiple sclerosis

M. Ban, D. Bredikhin, Y. Huang, M. J. Bonder, K. Katarzyna, A. J. Oliver, N. K. Wilson, P. Coupland, J. Hadfield, B. Göttgens, E. Madisoone, O. Stegle and S. Sawcer

554

Discrete class I molecules on brain endothelium differentially regulate neuropathology in experimental cerebral malaria

C. E. Fain, J. Zheng, F. Jin, K. Ayasoufi, Y. Wu, M. T. Lilley, A. R. Dropik, D. M. Wolf, R. C. Rodriguez, A. Aibaidula, Z. P. Tritz, S. M. Bouchal, L. L. Pewe, S. L. Urban, Y. Chen, S.-Y. Chang, M. J. Hansen, J. M. Kachergus, J. Shi, E. A. Thompson, H. E. Jensen, J. T. Harty, I. F. Parney, J. Sun, L.-J. Wu and A. J. Johnson

566

Glial reactivity and T cell infiltration in frontotemporal lobar degeneration with tau pathology

I. J. Hartnell, D. Woodhouse, W. Jasper, L. Mason, P. Marwaha, M. Graffeuil, L. C. Lau, J. L. Norman, D. S. Chatelet, L. Buee, J. A. R. Nicoll, D. Blum, G. Dorothee and D. Boche

590

Neural basis of speech and grammar symptoms in non-fluent variant primary progressive aphasia spectrum

D. L. Lorca-Puls, A. Gajardo-Vidal, M. L. Mandelli, I. Illán-Gala, Z. Ezzes, L. D. Wauters, G. Battistella, R. Bogley, B. Ratnasiri, A. E. Licata, P. Battista, A. M. García, B. L. Tee, S. Lukic, A. L. Boxer, H. J. Rosen, W. W. Seeley, L. T. Grinberg, S. Spina, B. L. Miller, Z. A. Miller, M. L. Henry, N. F. Dronkers and M. L. Gorno-Tempini

607

Extracellular vesicle proteome unveils cathepsin B connection to Alzheimer's disease pathogenesis

K. Yuyama, H. Sun, R. Fujii, I. Hemmi, K. Ueda and Y. Igeta

627

Alzheimer proteopathic tau seeds are biochemically a *forme fruste* of mature paired helical filaments
M. Kumar, N. Quittot, S. Dujardin, C. N. Schlaffner, A. Viode, A. Wiedmer, P. Beerepoot, J. E. Chun, C. Glynn, A. R. Fernandes, C. Donahue, J. A. Steen and B. T. Hyman
637

Trazodone rescues dysregulated synaptic and mitochondrial nascent proteomes in prion neurodegeneration
H. Albert-Gasco, H. L. Smith, B. Alvarez-Castelao, D. Swinden, M. Halliday, S. Janaki-Raman, A. J. Butcher and G. R. Mallucci
649

Gut microbiome correlates with plasma lipids in amyotrophic lateral sclerosis
K. Guo, C. Figueroa-Romero, M. H. Noureldein, B. J. Murdock, M. G. Savelieff, J. Hur, S. A. Goutman and E. L. Feldman
665

Increased presynaptic excitability in a migraine with aura mutation
P. Suryavanshi, P. Sawant-Pokam, S. Clair and K.C. Brennan
680

Microglia sense astrocyte dysfunction and prevent disease progression in an Alexander disease model
K. Saito, E. Shigetomi, Y. Shinozaki, K. Kobayashi, B. Parajuli, Y. Kubota, K. Sakai, M. Miyakawa, H. Horiuchi, J. Nabekura and S. Koizumi
698

Caspase cleavage of gasdermin E causes neuronal pyroptosis in HIV-associated neurocognitive disorder
J. P. Fernandes, W. G. Branton, E. A. Cohen, G. Koopman, I. Kondova, B. B. Gelman and C. Power
717

Book Review

Physick to Physiology
Z. Molnár
735

Letters to the Editor

Testing the disconnectome symptom discoverer model on out-of-sample post-stroke language outcomes
T. M. H. Hope, D. Neville, L. Talozzi, C. Foulon, S. J. Forkel, M. T. de Schotten and C. J. Price
e11

Principal component analysis-based latent-space dimensionality under-estimation, with uncorrelated latent variables
T. M. H. Hope, A. Halai, J. Crinion, P. Castelli, C. J. Price and H. Bowman
e14

Impact of multiple sclerosis risk alleles on the plasma proteome
S. A. Bernard Healey, G. Giovannoni, A. Noyce, R. Dobson and B. M. Jacobs
e17

Corrections

Correction to: Brain injury in COVID-19 is associated with dysregulated innate and adaptive immune responses
e22

Correction to: Normal and pathogenic variation of RFC1 repeat expansions: implications for clinical diagnosis
e23