

CURRICULUM VITAE



Paolo F Fabene during TEDx talk in Milan, IT, May 2018, https://www.ted.com/talks/paolo_fabene_does_size_matter

Paolo F Fabene is an Italian neuroscientist, Full Professor of Anatomy and Histology, and past member of the Governing Board of the Italian National Society of Neuroscience (2012- 2016). PI and co-PI on several private, university- and EU-funded grants, PFF laid the groundwork for innovative epilepsy treatments. In particular, PFF demonstrated in 2003 (and again in 2007) that the vascular phenomena are essential to the genesis of epileptic disease. In 2008, he published the first-ever demonstration that leuko-vascular interaction may play a key role in epileptogenesis. PFF further characterized the events underlying the mechanism of pathogenesis of epilepsy, opening new scenarios for the formulation of innovative therapies to fight this disease. The treatment developed in PFF's lab provided for the administration of specific antibodies that prevented leukocyte-endothelium binding (patented), thus preventing seizures and avoiding the chronic alterations in the formation of the blood-brain barrier, blocking the excitability of neurons that favored seizures (Fabene et al., Nat Med., 2008). Nature Medicine, Nature, Nature Reviews in Drug Discovery, and other leading journal-published editorials focused on these results, thus indicating the impact of these results on the scientific community. Furthermore, in 2021, PFF's research group (Mengoni et al., Epilepsia) provided the first evidence that dysbiosis may play a critical role in seizure susceptibility. PFF's group demonstrated the direct impact of microbiota transplanted from epileptic animals to healthy recipient animals, thus clarifying whether the microbiota from animals with epilepsy can affect the excitability of the recipients' brains by lowering seizure thresholds.

Paolo Francesco Fabene

Date and Place of Birth: July 20 1973, Lodi, Italy

Citizenship: Italian

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Languages: Italian, English, Portuguese.

EDUCATION & POSITIONS:

September 1996- August 1997:

Erasmus fellow at the Institute of Comparative Psycho-Physiology, Faculty of Psychology and Institute of Anatomy and Embryology, Faculty of Medicine, Radboud University Nijmegen, the Netherlands (Supervisor: Prof. G. van Luijtelaar)

September 1997-January 2005:

Research fellow, Section of Anatomy and Histology, Faculty of Medicine, University of Verona.

Since 1998-January 2005:

Research fellow, Experimental MRI Center, University of Verona, Verona, Italy

July 1998:

Degree at the University of Padua, Faculty of Psychology, Course in Psychobiological Sciences. Thesis: "Experimental study on the neural correlates of the sensory gating by the induction of the c-fos gene" (Supervisors: Prof. P. Bisiacchi, Prof. M. Bentivoglio, Prof. E.L.J.M. van Luijtelaar), with the mark: 110/110

November 1998:

Graduate student, Ph.D. Curriculum in Neuroscience (Dottorato di Ricerca in Neuroscienze), University of Verona, Italy (Supervisor: Prof. M. Bentivoglio)

February-March 1999:

Research fellow of the Laboratory of Neuropsychology, NIMH, Bethesda, MD, U.S.A. (Supervisor: Dr. M. Mishkin)

May-August 1999:

Research fellow of the Laboratory of Experimental Neurology, EPM-UNIFESP, Sao Paulo, Brazil. (Supervisor: Prof. E.A. Cavalheiro)

November 2000 – April 2001:

Visiting Professor of the Laboratory of Nutritional Physiology, Federal University of Pernambuco, Recife, Brazil.

February 18 2003:

Ph.D. degree in Neuroscience

Since January 1 2005:

Assistant Professor in Human Anatomy (BIO/16), Faculty of Medicine,
Dept. Morphological and Biomedical Sciences, Verona, Italy

Since January 1 2005:

Supervisor of the Behavioural and Biopotentials Analysis Lab, Faculty of Medicine,
Dept. Morphological and Biomedical Sciences, Verona, Italy. Prof. Fabene
organized and is currently supervising an international-level behavioral lab
composed of seven independent setups that are entirely acoustically and thermally
isolated.

January 1 2011:

Associate Professor in Human Anatomy (BIO/16), Faculty of Medicine,
Dept. Morphological and Biomedical Sciences, Verona, Italy

September 2014:

National habilitation for Full Professorship of Histology

April 2017:

National habilitation for Full Professorship of Anatomy

October 1 2018- October 1 2024:

Chair of the Council for the Degree Course in Nursing and Chair of the Master's
Degree in Nursing and Obstetrics, School of Medicine, University of Verona, Italy.

October 1 2024- October 1 2027:

Chair of the Council for the Degree Course in Nursing and Health Assistance;
Chair of the Master's Degree in Nursing and Obstetrics, School of Medicine,
University of Verona, Italy.

November 1 2018:

Full Professor in Histology (BIO/17), Faculty of Medicine, Dept.
Neuroscience, Biomedicine, Verona, Italy

FABENE'S LAB:

1. Animal phenotyping facility: 16 Rat Noldus Phenotypers XT, 16 Mouse Phenotypers XT, semi-automating behavioral scoring (Noldus Observer XT and Noldus Ethovision XT)
2. Biopotential recording rats/mice: 16 DSI telemetric EEG, EMG, EKG, blood pressure and body temperature setups for 24/day recording; 6 video-telemetric EEG setups (DSI+Noldus); 6 cubicles for auditory Evoked Potentials (SEPs, AEPs, P300 oddball, etc); 32 channels Grass EEG recording system for conventional EEG; 1 deep-brain cell stimulus delivery system (Grass and ADInstrument).
3. Animal cognitive evaluation: NOR, MWM, Ultavox, social interactions, Fear conditioning, Light-dark shuttle box, automated RAM, Forced swim test, Barnes test, Y-maze test, open field, EPM, touchscreen and three more tests developed in the lab actually under patenting. Locomotor evaluation: CatWalk (Noldus), Rotarod, Grip strength meter.
4. 7T Bruker MRI equipped with custom EEG and ERPs device and with cardiac and respiratory gating (Biopack)
5. Microscopy facility: 3 Light/Fluorescent Microscopes (Olympus, Zeiss, Nikon) equipped with Neurolucida for morphometry, stereological counts, and 3D cell reconstruction; 1 Transmission electron microscopy; 1 scanning electron microscopy; 1 confocal microscopy (inter-Department); 1 two-photon laser scanning microscopy (inter-Department)
6. Caliper IVIS Spectrum for bioluminescent and biofluorescent 3D tomography. For non-invasive longitudinal monitoring of disease progression, cell trafficking, and gene expression patterns in living animals
7. MAGPIX xPONENT 4.1 System (Luminex): multiplexing platform capable of performing qualitative and quantitative analysis of proteins and nucleic acids in a variety of sample matrices
8. Patch clamp system equipped with calcium imaging acquisition setup
9. Drug testing apparatus: 20 parallel syringe computer-assisted system for testing drug efficacy, pro-convulsive effects, etc

10. Animal models of neurological disorders: pharmacological models of TLE, pharmaco-resistant TLE; genetic model of absence epilepsy (Wag/Rij rats); animal models of Parkinson's disease (c-Rel mice); animal models of Alzheimer diseases (PD-APP, TASTPM, triple tg (Tau +PS2+APP)).

PATENT APPLICATION

December 21, 2007, first author for International Patent Application No. PCT/US2007/013624 entitled "Anti-Leukocyte Recruitment Therapy for the Treatment of Seizures and Epilepsy": assigned publication number WO 2007/146188, USPTO Application #: 20080025992 -Class: 424158100 (USPTO)

COMPANIES

July 6 2010

Co-founder of *Veneto Pharma s.r.l.*, a *spin-off* of the University of Verona, Faculty of Medicine, Verona, Italy.

March 2013

Co-founder of *Leuvas Inc*, 2416 Tamalpais St., Mountain View, CA 94043, USA

BETA-TESTER & SCIENTIFIC PARTNERS

Noldus Information Technology, Wageningen, the Netherlands

Telemetrytronics (Wageningen, the Netherlands),

Ugo Basile (Varese, Italy)

Notocord (Newark, NJ, USA)

Data Sciences International (DSI, St. Paul, MN, USA)

MEMBERSHIPS

Italian Neuromorphology Society (*Gruppo di Studio per la neuromorfologia, GISN*)

Italian Society of Anatomy and Histology (*Società Italiana di Anatomia ed Istologia, SIAI*)

Italian Society of Neurosciences (*Società Italiana di Neuroscienze, SINS*)

Federation of European Neuroscience Societies (FENS)

Society for Neuroscience (SFN)

Italian League against epilepsy (*Lega Italiana contro l'epilessia, LICE*)

COMMITTEE

July 2006-July 2016

Member of the National Commission for translational epilepsy (LICE)

July 2012-July 2016

Member of the Governing Board of the Italian National Society of Neuroscience

EDITORIAL EXPERIENCE

Referee in over 40 international scientific journals; *intra alia*: Brain, Brain Research, Epilepsia, Hippocampus, Nature Reviews in Drug Discovery, Neurobiology of Diseases, NeuroImage, Neuroscience, Neuroscience Letters, Physiology & Behavior, Scientific Reports, etc.

1999-2004

Editorial Assistant of Prof. Marina Bentivoglio, Section Editor for "*Functional and Molecular Neuroanatomy and Experimental Neuropathology*" of the international journal *Brain Research Bulletin* (Elsevier, Shannon, Ireland)

January 1 2005 -NOW

- Editorial Board of "Frontiers in Pharmacology"
- Editorial Board of Applied Sciences "Applied Neuroscience and Neural Engineering"
- Editorial Board of the *International Reviewers Panel of Medical Science Monitor*
- Editorial Board of "World Journal of Translational Medicine (WJTM)"

TEACHING EXPERIENCES

Prof Fabene has been (or is currently) a supervisor of more than 15 PhD students in the "Neurosciences" course, "Multimodal imaging" course, and "Nanotechnology" course, and more than 50 students for the bachelor thesis dissertation.

In the last ten years, Prof Fabene has been involved in many teaching activities; in particular, Prof Fabene has been/is:

- Professor of Histology and Anatomy for Medical School Degree, University of Verona
- Professor of Anatomy for Degree in Dentistry and Dental Implants, University of Verona
- Professor of Histology and Anatomy for Nursing Degree (Verona), University of Verona
- Professor of Anatomy for Nursing Degree (Bolzano), University of Verona
- Professor of Anatomy for Obstetrician (Verona), University of Verona
- Member of the professor board of the Nanotechnology PhD curriculum, University of Verona;
- Member of the Professor board of the Neuroscience PhD curriculum, University of Verona;

- Member of the Professor board of the "IRCSS Bonino-Pulejo" Neuroscience PhD curriculum, Messina;
- Professor, Medical Postgraduate Specialization in Maxillofacial Surgery, Faculty of Medicine, University of Verona
- Professor, Medical Postgraduate Specialization in Psychiatry, Faculty of Medicine, University of Verona
- Professor, Medical Postgraduate Specialization Neurology, Faculty of Medicine, University of Verona
- Professor, Medical Postgraduate Specialization in Paediatric Neuropsychiatry, Faculty of Medicine, University of Verona
- Professor, Medical Postgraduate Specialization in Cardiac Surgery, Faculty of Medicine, University of Verona
- Supervisor of Human cadaver dissection (University of Szeged, Hungary), Faculty of Medicine, University of Verona

MEETING ABSTRACTS

Prof Fabene has authored more than 300 abstracts and has communicated to national and international meetings. Prof Fabene has currently 2730 citations, h-index=26, i10-index=35 (scholar.google.com)

PUBLICATIONS (*in extenso*)

1: *Alves M, Gil B, Villegas-Salmerón J, Salari V, Martins-Ferreira R, Arribas Blázquez M, Menéndez Méndez A, Da Rosa Gerbatin R, Smith J, de Diego-Garcia L, Conte G, Sierra-Marquez J, Merino Serrais P, Mitra M, Fernandez Martin A, Wang Y, Kesavan J, Melia C, Parras A, Beamer E, Zimmer B, Heiland M, Cavanagh B, Parcianello Cipolat R, Morgan J, Teng X, Prehn JHM, Fabene PF, Bertini G, Artalejo AR, Ballestar E, Nicke A, Olivos-Oré LA, Connolly NMC, Henshall DC, Engel T. Opposing effects of the purinergic P2X7 receptor on seizures in neurons and microglia in male mice. Brain Behav Immun. 2024 Aug;120:121-140. doi: 10.1016/j.bbi.2024.05.023. Epub 2024 May 20. PMID: 38777288.*

2: *Spagnoli G, Parrella E, Ghazanfar Tehrani S, Mengoni F, Salari V, Nistoreanu*

C, Scambi I, Sbarbati A, Bertini G, Fabene PF. Glial Response and Neuronal Modulation Induced by Epidural Electrode Implant in the Pilocarpine Mouse Model of Epilepsy. *Biomolecules*. 2024 Jul 11;14(7):834. doi: 10.3390/biom14070834. PMID: 39062548; PMCID: PMC11274793.

3: Ekong MB, Andrioli A, Israel IE, Ifot EI, Dickson SE, Scambi I, Fabene PF, Bertini G, Bentivoglio M. Evaluation of prenatal calabash chalk geophagy on the developing brain of Wistar rats. *IBRO Neurosci Rep*. 2024 Mar 14;16:443-454. doi: 10.1016/j.ibneur.2024.03.007. PMID: 38544793; PMCID: PMC10966185.

4: Andrioli A, Fabene PF, Mudò G, Barresi V, Di Liberto V, Frinchi M, Bentivoglio M, Condorelli DF. Downregulation of the Astroglial Connexin Expression and Neurodegeneration after Pilocarpine-Induced Status Epilepticus. *Int J Mol Sci*. 2022 Dec 20;24(1):23. doi: 10.3390/ijms24010023. PMID: 36613467; PMCID: PMC9819917.

5: Parrella E, Del Gallo F, Porrini V, Gussago C, Benarese M, Fabene PF, Pizzi M. Age-Dependent Neuropsychiatric Symptoms in the NF- κ B/c-Rel Knockout Mouse Model of Parkinson's Disease. *Front Behav Neurosci*. 2022 Mar 11;16:831664. doi: 10.3389/fnbeh.2022.831664. PMID: 35368305; PMCID: PMC8965703.

6: Mengoni F, Salari V, Kosenkova I, Tsenov G, Donadelli M, Malerba G, Bertini G, Del Gallo F, Fabene PF. Gut microbiota modulates seizure susceptibility. *Epilepsia*. 2021 Sep;62(9):e153-e157. doi: 10.1111/epi.17009. Epub 2021 Jul 29. PMID: 34324703; PMCID: PMC8457192.

7: Peikert K, Federti E, Matte A, Constantin G, Pietronigro EC, Fabene PF, Defilippi P, Turco E, Del Gallo F, Pucci P, Amoresano A, Illiano A, Cozzolino F, Monti M, Garelo F, Terreno E, Alper SL, Glaß H, Pelzl L, Akgün K, Ziemssen T, Ordemann R, Lang F, Brunati AM, Tibaldi E, Andolfo I, Iolascon A, Bertini G, Buffelli M, Zancanaro C, Lorenzetto E, Siciliano A, Bonifacio M, Danek A, Walker RH, Hermann A, De Franceschi L. Therapeutic targeting of Lyn kinase to treat

chorea-acanthocytosis. *Acta Neuropathol Commun.* 2021 May 3;9(1):81. doi: 10.1186/s40478-021-01181-y. PMID: 33941276; PMCID: PMC8091687.

8: Picelli A, Filippetti M, Del Piccolo L, Schena F, Chelazzi L, Della Libera C, Donadelli M, Donisi V, Fabene PF, Fochi S, Fonte C, Gandolfi M, Gomez-Lira M, Locatelli E, Malerba G, Mariotto S, Milanese C, Patuzzo C, Romanelli MG, Sbarbati A, Tamburin S, Venturelli M, Zamparo P, Carcereri de Prati A, Butturini E, Varalta V, Smania N. *Rehabilitation and Biomarkers of Stroke Recovery: Study Protocol for a Randomized Controlled Trial.* *Front Neurol.* 2021 Jan 15;11:618200. doi: 10.3389/fneur.2020.618200. PMID: 33519698; PMCID: PMC7843518.

9: Salari V, Mengoni F, Del Gallo F, Bertini G, Fabene PF. *The Anti-Inflammatory Properties of Mesenchymal Stem Cells in Epilepsy: Possible Treatments and Future Perspectives.* *Int J Mol Sci.* 2020 Dec 18;21(24):9683. doi: 10.3390/ijms21249683. PMID: 33353235; PMCID: PMC7765947.

10: Venø MT, Reschke CR, Morris G, Connolly NMC, Su J, Yan Y, Engel T, Jimenez-Mateos EM, Harder LM, Pultz D, Haunsberger SJ, Pal A, Heller JP, Campbell A, Langa E, Brennan GP, Conboy K, Richardson A, Norwood BA, Costard LS, Neubert V, Del Gallo F, Salvetti B, Vangoor VR, Sanz-Rodriguez A, Muilu J, Fabene PF, Pasterkamp RJ, Prehn JHM, Schorge S, Andersen JS, Rosenow F, Bauer S, Kjems J, Henshall DC. *A systems approach delivers a functional microRNA catalog and expanded targets for seizure suppression in temporal lobe epilepsy.* *Proc Natl Acad Sci U S A.* 2020 Jul 7;117(27):15977-15988. doi: 10.1073/pnas.1919313117. Epub 2020 Jun 24. Erratum in: *Proc Natl Acad Sci U S A.* 2024 Jul 16;121(29):e2411972121. doi: 10.1073/pnas.2411972121. PMID: 32581127; PMCID: PMC7355001.

11: Vondrakova K, Novotny P, Kubova H, Posusta A, Boron J, Faberova V, Fabene

PF, Burchfiel J, Tsenov G. Electrographic seizures induced by activation of ET_A and ET_B receptors following intrahippocampal infusion of endothelin-1 in immature rats occur by different mechanisms. *Exp Neurol*. 2020 Jun;328:113255. doi: 10.1016/j.expneurol.2020.113255. Epub 2020 Feb 19. PMID: 32084451.

12: Del Percio C, Drinkenburg W, Lopez S, Pascarelli MT, Lizio R, Noce G, Ferri R, Bastlund JF, Laursen B, Christensen DZ, Pedersen JT, Forloni G, Frasca A, Noè FM, Fabene PF, Bertini G, Colavito V, Bentivoglio M, Kelley J, Dix S, Infarinato F, Soricelli A, Stocchi F, Richardson JC, Babiloni C; PharmaCog Consortium. Ongoing Electroencephalographic Rhythms Related to Exploratory Movements in Transgenic TASTPM Mice. *J Alzheimers Dis*. 2020;78(1):291-308. doi: 10.3233/JAD-190351. PMID: 32955458.

13: Del Percio C, Drinkenburg W, Lopez S, Limatola C, Bastlund JF, Christensen DZ, Pedersen JT, Forloni G, Frasca A, Noe FM, Bentivoglio M, Fabene PF, Bertini G, Colavito V, Dix S, Ferri R, Bordet R, Richardson JC, Babiloni C. Ongoing Electroencephalographic Activity Associated with Cortical Arousal in Transgenic PDAPP Mice (hAPP V717F). *Curr Alzheimer Res*. 2018;15(3):259-272. doi: 10.2174/1567205014666170704113405. PMID: 28675996.

14: Radu BM, Osculati AMM, Suku E, Banciu A, Tsenov G, Merigo F, Di Chio M, Banciu DD, Tognoli C, Kacer P, Giorgetti A, Radu M, Bertini G, Fabene PF. All muscarinic acetylcholine receptors (M_1 - M_5) are expressed in murine brain microvascular endothelium. *Sci Rep*. 2017 Jul 11;7(1):5083. doi: 10.1038/s41598-017-05384-z. PMID: 28698560; PMCID: PMC5506046.

15: Radu BM, Epureanu FB, Radu M, Fabene PF, Bertini G. Nonsteroidal anti-inflammatory drugs in clinical and experimental epilepsy. *Epilepsy Res*. 2017 Mar;131:15-27. doi: 10.1016/j.epilepsyres.2017.02.003. Epub 2017 Feb 9. PMID:

28212985.

16: Del Percio C, Drinkenburg W, Lopez S, Infarinato F, Bastlund JF, Laursen B, Pedersen JT, Christensen DZ, Forloni G, Frasca A, Noè FM, Bentivoglio M, Fabene PF, Bertini G, Colavito V, Kelley J, Dix S, Richardson JC, Babiloni C; PharmaCog Consortium. On-going electroencephalographic rhythms related to cortical arousal in wild-type mice: the effect of aging. *Neurobiol Aging*. 2017 Jan;49:20-30. doi: 10.1016/j.neurobiolaging.2016.09.004. Epub 2016 Sep 15. PMID: 27728831.

17: Radu BM, Radu M, Tognoli C, Benati D, Merigo F, Assfalg M, Solani E, Stranieri C, Ceccon A, Fratta Pasini AM, Cominacini L, Bramanti P, Osculati F, Bertini G, Fabene PF. Are they in or out? The elusive interaction between Qtracker® 800 vascular labels and brain endothelial cells. *Nanomedicine (Lond)*. 2015 Nov;10(22):3329-42. doi: 10.2217/nnm.15.120. Epub 2015 Jul 15. PMID: 26177081.

18: di Nuzzo L, Orlando R, Tognoli C, Di Pietro P, Bertini G, Miele J, Bucci D, Motolese M, Scaccianoce S, Caruso A, Mauro G, De Lucia C, Battaglia G, Bruno V, Fabene PF, Nicoletti F. Antidepressant activity of fingolimod in mice. *Pharmacol Res Perspect*. 2015 Jun;3(3):e00135. doi: 10.1002/prp2.135. Epub 2015 May 24. PMID: 26171219; PMCID: PMC4492751.

19: Daducci A, Tambalo S, Fiorini S, Osculati F, Teti M, Fabene PF, Corsi M, Bifone A, Sbarbati A, Marzola P. Manganese-enhanced magnetic resonance imaging investigation of the interferon- α model of depression in rats. *Magn Reson Imaging*. 2014 Jun;32(5):529-34. doi: 10.1016/j.mri.2014.02.006. Epub 2014 Feb 10. PMID: 24629516.

20: Colavito V, Fabene PF, Grassi-Zucconi G, Pifferi F, Lamberty Y, Bentivoglio M, Bertini G. Experimental sleep deprivation as a tool to test memory deficits in rodents. *Front Syst Neurosci*. 2013 Dec 13;7:106. doi:

10.3389/fnsys.2013.00106. PMID: 24379759; PMCID: PMC3861693.

21: Bertini G, Bramanti P, Constantin G, Pellitteri M, Radu BM, Radu M, Fabene PF. New players in the neurovascular unit: insights from experimental and clinical epilepsy. *Neurochem Int.* 2013 Dec;63(7):652-9. doi: 10.1016/j.neuint.2013.08.001. Epub 2013 Aug 17. PMID: 23962437.

22: Fabene PF, Laudanna C, Constantin G. Leukocyte trafficking mechanisms in epilepsy. *Mol Immunol.* 2013 Aug;55(1):100-4. doi: 10.1016/j.molimm.2012.12.009. Epub 2013 Jan 23. PMID: 23351392.

23: Pizzini FB, Farace P, Manganotti P, Zoccatelli G, Bongiovanni LG, Golay X, Beltramello A, Osculati A, Bertini G, Fabene PF. Cerebral perfusion alterations in epileptic patients during peri-ictal and post-ictal phase: PASL vs DSC-MRI. *Magn Reson Imaging.* 2013 Jul;31(6):1001-5. doi: 10.1016/j.mri.2013.03.023. Epub 2013 Apr 24. PMID: 23623332.

24: Babiloni C, Infarinato F, Aujard F, Bastlund JF, Bentivoglio M, Bertini G, Del Percio C, Fabene PF, Forloni G, Herrero Ezquerro MT, Noè FM, Pifferi F, Ros-Bernal F, Christensen DZ, Dix S, Richardson JC, Lamberty Y, Drinkenburg W, Rossini PM. Effects of pharmacological agents, sleep deprivation, hypoxia and transcranial magnetic stimulation on electroencephalographic rhythms in rodents: towards translational challenge models for drug discovery in Alzheimer's disease. *Clin Neurophysiol.* 2013 Mar;124(3):437-51. doi: 10.1016/j.clinph.2012.07.023. Epub 2012 Oct 4. PMID: 23040292.

25: Radu BM, Bramanti P, Osculati F, Flonta ML, Radu M, Bertini G, Fabene PF. Neurovascular unit in chronic pain. *Mediators Inflamm.* 2013;2013:648268. doi: 10.1155/2013/648268. Epub 2013 Jun 5. PMID: 23840097; PMCID: PMC3687484.

26: Baiguera C, Alghisi M, Pinna A, Bellucci A, De Luca MA, Frau L, Morelli M, Ingrassia R, Benarese M, Porrini V, Pellitteri M, Bertini G, Fabene PF, Sigala

S, Spillantini MG, Liou HC, Spano PF, Pizzi M. Late-onset Parkinsonism in NFκB/c-Rel-deficient mice. *Brain*. 2012 Sep;135(Pt 9):2750-65. doi: 10.1093/brain/aws193. Epub 2012 Aug 21. PMID: 22915735; PMCID: PMC3437025.

27: Dedeurwaerdere S, Friedman A, Fabene PF, Mazarati A, Murashima YL, Vezzani

A, Baram TZ. Finding a better drug for epilepsy: antiinflammatory targets. *Epilepsia*. 2012 Jul;53(7):1113-8. doi: 10.1111/j.1528-1167.2012.03520.x. Epub 2012 Jun 12. PMID: 22691043; PMCID: PMC3389561.

28: Marchi N, Johnson AJ, Puvenna V, Johnson HL, Tierney W, Ghosh C, Cucullo L, Fabene PF, Janigro D. Modulation of peripheral cytotoxic cells and ictogenesis in a model of seizures. *Epilepsia*. 2011 Sep;52(9):1627-34. doi: 10.1111/j.1528-1167.2011.03080.x. Epub 2011 May 31. PMID: 21627645; PMCID: PMC3728674.

29: Navarro-Mora G, Fabene PF, van Luijckelaar G. Early onset of age-related changes on neural processing in rats. *Physiol Behav*. 2011 May 3;103(2):134-43. doi: 10.1016/j.physbeh.2011.02.026. Epub 2011 Feb 25. PMID: 21354431.

30: Paradiso B, Zucchini S, Su T, Bovolenta R, Berto E, Marconi P, Marzola A, Navarro Mora G, Fabene PF, Simonato M. Localized overexpression of FGF-2 and BDNF in hippocampus reduces mossy fiber sprouting and spontaneous seizures up to 4 weeks after pilocarpine-induced status epilepticus. *Epilepsia*. 2011 Mar;52(3):572-8. doi: 10.1111/j.1528-1167.2010.02930.x. Epub 2011 Jan 26. PMID: 21269288.

31: Bovolenta R, Zucchini S, Paradiso B, Rodi D, Merigo F, Navarro Mora G, Osculati F, Berto E, Marconi P, Marzola A, Fabene PF, Simonato M. Hippocampal FGF-2 and BDNF overexpression attenuates epileptogenesis-associated neuroinflammation and reduces spontaneous recurrent seizures. *J*

Neuroinflammation. 2010 Nov 18;7:81. doi: 10.1186/1742-2094-7-81. PMID: 21087489; PMCID: PMC2993685.

32: Norwood BA, Bumanglag AV, Osculati F, Sbarbati A, Marzola P, Nicolato E, Fabene PF, Sloviter RS. Classic hippocampal sclerosis and hippocampal-onset epilepsy produced by a single "cryptic" episode of focal hippocampal excitation in awake rats. *J Comp Neurol*. 2010 Aug 15;518(16):3381-407. doi: 10.1002/cne.22406. PMID: 20575073; PMCID: PMC2894278.

33: Fabene PF, Bramanti P, Constantin G. The emerging role for chemokines in epilepsy. *J Neuroimmunol*. 2010 Jul 27;224(1-2):22-7. doi: 10.1016/j.jneuroim.2010.05.016. Epub 2010 Jun 9. PMID: 20542576.

34: Fabene PF. Non-neuronal cells, inflammation and epilepsy (Commentary on Aronica et al.). *Eur J Neurosci*. 2010 Mar;31(6):1098-9. doi: 10.1111/j.1460-9568.2010.07187.x. PMID: 20377622.

35: Mazzuferi M, Palma E, Martinello K, Maiolino F, Roseti C, Fucile S, Fabene PF, Schio F, Pellitteri M, Sperk G, Miledi R, Eusebi F, Simonato M. Enhancement of GABA(A)-current run-down in the hippocampus occurs at the first spontaneous seizure in a model of temporal lobe epilepsy. *Proc Natl Acad Sci U S A*. 2010 Feb 16;107(7):3180-5. doi: 10.1073/pnas.0914710107. Epub 2010 Jan 26. PMID: 20133704; PMCID: PMC2840298.

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