

BIOGRAPHICAL SKETCH

Name: <i>[First, Middle Initial(s), Last, Degree(s)]</i> Elena H Martínez-Lapiscina, M.D. PhD	Position/Title: Scientific Officer-Clinical Specialist European Medicines Agency-Evaluation Div.
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Education

Institution and Location	Degree	Year Conferred	Field of Study
University of Navarra, Pamplona Spain	MD	June 2006	Medicine
Complejo Hospitalario de Navarra, Spain	Residence	May 2012	Neurologist
University of Navarra, Pamplona Spain	PhD	May 2013	Neurosciences/Neuroepidemiology
Institute of Biomedical Sciences August Pi i Sunyer (IDIBAPS)	Postdoctoral Fellowship	Dec 2015	Neuroimmunology & Neuroimaging
Harvard School of Public Health	MPH-EPI	May 2019	Public Health, Epidemiology, statistics

PROFESSIONAL ACTIVITIES

- April 2019-Actual Scientific Officer-Clinical Specialist. European Medicines Agency-Evaluation Division, Amsterdam, The Netherlands
- Jan 2017 –April 2019 Hospital Clinic of Barcelona, Barcelona, Spain
- Jun 2012- Dec 2016 Institute of Biomedical Sciences August Pi i Sunyer, Barcelona, Spain
- May 2008-May 2012 Complejo Hospitalario de Navarra, Pamplona, Spain.
- May 2007-March 2018 Hospital Infantil La Paz, Madrid, Spain

RESEARCH EXPERIENCE

- April 2019-Actual Collaborator in the Visual-Pathway lab as external activity
- Jan 2017 –April 2019 Hospital Clinic of Barcelona, Spain as neurologist (MS treating specialist) and Director of the Visual-Pathway lab.
- Jan 2016- Dec 2016 Institute of Biomedical Sciences August Pi i Sunyer Barcelona, Spain as Postdoctoral Junior PI
- Jan 2014-Dec 2015 Institute of Biomedical Sciences August Pi i Sunyer Barcelona, Spain as Postdoctoral Researcher with the National Research Fellowship Río Hortega
- July 2014-October 2014 University of California San Francisco (UCSF) as Postdoctoral Researcher.
- May 2012- Dec 2013 Institute of Biomedical Sciences August Pi i Sunyer, Barcelona, Spain Predoctoral Research assistant.
- May 2008-May 2013 Epidemiology and Public Health Department, University of Navarra, Spain Predoctoral Research assistant.

HONORS AND AWARDS

- 2019 GPA 4/4 MPH-EPI, Harvard School of Public Health, Harvard University
- 2016 One oral communication (first author) elected as Best Investigator Oral Presentations "*Comunicación Estelar*" [demyelinating disease categories] in the Spanish Neurological Society Annual Conference granted by Spanish Neurological Society.
- 2016 Recipient of a large competitive research grant: Grant for MS Innovation 2016 granted by Merck.
- 2015 Two oral communications (first/last author) elected as Best Investigator Oral Presentations "*Comunicación Estelar*" [ophthalmology & demyelinating disease categories] in the Spanish Neurological Society Annual Conference granted by Spanish Neurological Society.
- 2015 Elected fellow (rank 1/30) for short-stage exchange national fellowship (M-AES MV/1500012) granted by The Institute of Carlos III, The Spanish Agency of Research.
- 2014 Elected Principal Investigator for 2014 La Marató TV3 Research Call granted by La Fundación TV3 (20142030).

- 2013 Elected fellow (rank 4/235) for National Competitive Research Fellowship Río Hortega program (CM13/00150) granted by The Institute of Carlos III, The Spanish Agency of Research.
- 2013 Cum Laude PhD (GPA: 4.00/4.00), University of Navarra under supervision of Prof. Dr. Miguel Angel Martinez-González.
- 2012 Elected Fellow for the Symposium Methodology for Clinical Research, Harvard University – Real Colegio Complutense, Boston, US.
- 2012 Elected Fellow for Ignacio Landecho Exchange Fellowship granted by Medical Association of Physicians in Navarra.
- 2008 First position over 12.000 students in the MIR National examination in 2007 call granted by Spanish Health Ministry. Inscription in September 2007, exam in January 2008 and results in April 2008.
- 2007 Elected as one of the top 5 academic records of promotion, 2006 granted by The University of Navarra, School of Medicine GPA=3.99/4.00.
- 2007 Special mention at the National Spanish Award Degree (2005-2006) granted by the Ministry of Education and Science, Spain Order ECI/2922/2006 (B.O.E. 25 September 2007) GPA=3.99.

TEACHING

Students and fellows supervised or mentored:

Dates	Name	Program or School	Role
2018-2018	Hèlia Brull	UPC	Summer practices
2016-2017	Alex Vicente Sola	Pompeu Fabra	Final degree project
2016-Present	Magí Andorrà Inglés	PhD UB, BCN	Director of PhD
2016-2018	Andrés Cruz-Herranz	PhD UB, BCN	Director of PhD
2016-Present	Irene Pulido Valdeolivas	Visual Pathway Lab	Research mentor
2015-2016	Magí Andorrà Inglés	MSc UAB, BCN	Director MSc
2015	Boglárka Varga	Fellowship	Research mentor
2014-2015	Santiago Ortiz-Perez	PhD UB, BCN	Director of PhD
2014-2015	Erika J. Lampert	Undergraduate Fullbright	Research mentor
2014	Marco Vabadesi	MD, fellowship exchange	Research mentor
2014	Miquel Marqués Cami	MD, UB	Final degree project
2014	Alba de Los Santos Capdevila	Biomedical Engineer	Final degree project
2013-2014	Iñigo Gabilondo	PhD, UB, BCN	Director of PhD

CLINICAL SERVICES

2012-2019 Department of Neurology at Hospital Clinic of Barcelona: Neurologist, Multiple Sclerosis Center. Hospital Clinic of Barcelona (2 day/week): Day Care Hospital, MS and Immune-mediated disorders Outpatient Clinic and multidisciplinary neuro-ophthalmology outpatient (Staff of Hospital Clinic).

RESEARCH INTEREST

- (1) Pathogenesis and marker development in neurological conditions particularly for multiple sclerosis, neuromyelitis optica spectrum disorders and acute optic neuritis
- (2) Epidemiology & Public Health for neurological conditions

PEER REVIEW PUBLICATIONS

H-Index: 19 01/06/2019

1. Zubizarreta I, Flórez-Grau G, Vila G, Cabezón R, España C, Andorra M, Saiz A, Llufríu S, Sepulveda M, Sola-Valls N, **Martinez-Lapiscina** EH, Pulido-Valdeolivas I, Casanova B, Martinez Gines M, Tellez N, Oreja-Guevara C, Español M, Trias E, Cid J, Juan M, Lozano M, Blanco Y, Steinman L, Benitez-Ribas D, Villoslada P. Immune tolerance in multiple sclerosis and neuromyelitis optica with peptide-loaded tolerogenic dendritic cells in a phase 1b trial. Proc Natl Acad Sci U S A. 2019 Apr 23;116(17):8463-8470

2. Nolan RC, Liu M, Akhand O, Calabresi PA, Paul F, Petzold A, Balk L, Brandt AU, **Martínez-Lapiscina EH**, Saidha S, Villoslada P, Al-Hassan AA, Behbehani R, Frohman EM, Frohman T, Havla J, Hemmer B, Jiang H, Knier B, Korn T, Leocani L, Papadopoulou A, Pisa M, Zimmermann H, Galetta SL, Balcer LJ; IMSVISUAL Consortium. Optimal Inter-Eye Difference Thresholds by OCT in MS: An International Study. *Ann Neurol*. 2019 Mar 9. doi: 10.1002/ana.25462.
3. Andorra M, **Martinez-Lapiscina EH**. Reporting of R2 Statistics for Mixed-Effects Regression Models-Reply. *JAMA Neurol*. 2019 Feb 4.
4. Villoslada P, **Martinez-Lapiscina EH**. Remyelination: a good neuroprotective strategy for preventing axonal degeneration? *Brain*. 2019 Feb 1;142(2):233-236.
5. Pedreño M, Sepúlveda M, Armangué T, Sabater L, Martínez-Hernandez E, Arrambide G, Blanco Y, Llufríu S, **Martínez-Lapiscina EH**, Mulero P, Sola-Valls N, Ruiz-García R, Tintoré M, Dalmau J, Graus F, Saiz A. Frequency and relevance of IgM, and IgA antibodies against MOG in MOG-IgG-associated disease. *Mult Scler Relat Disord*. 2019 Jan 3;28:230-234.
6. Solà-Valls N, Vicente-Pascual M, Blanco Y, Solana E, Llufríu S, Martínez-Heras E, **Martínez-Lapiscina EH**, Sepúlveda M, Pulido-Valdeolivas I, Zubizarreta I, Saiz A. Spanish validation of the telephone assessed Expanded Disability Status Scale and Patient Determined Disease Steps in people with multiple sclerosis. *Mult Scler Relat Disord*. 2018 Nov 19;27:333-339
7. Balcer LJ, Balk LJ, Brandt AU, Calabresi PA, **Martinez-Lapiscina EH**, Nolan RC, Paul F, Petzold A, Saidha S. The International Multiple Sclerosis Visual System Consortium: Advancing Visual System Research in Multiple Sclerosis. *J Neuroophthalmol*. 2018 Dec;38(4):494-501
8. Solana E, Martinez-Heras E, **Martinez-Lapiscina EH**, Sepulveda M, Sola-Valls N, Bargalló N, Berenguer J, Blanco Y, Andorra M, Pulido-Valdeolivas I, Zubizarreta I, Saiz A, Llufríu S. Magnetic resonance markers of tissue damage related to connectivity disruption in multiple sclerosis. *Neuroimage Clin*. 2018;20:161-168.
9. Sola-Valls N; Blanco Y; Sepulveda M; Llufríu S; **Martinez-Lapiscina EH**; Zubizarreta I; Pulido-Valdeolivas I; Montejo C; Villoslada P and Saiz A. Combined walking outcome measures identify clinically meaningful response to prolonged-release fampridine. *Ther Adv Neurol Disord*. 2018;11:1756286418780007
10. Andorra, M; Nakamura K; Lampert EJ; Pulido-Valdeolivas I; Llufríu S; Martinez-Heras E; Sola-Valls N; Sepulveda M; Tercero-Uribe A; Blanco Y; Saiz A; Villoslada P; **Martinez-Lapiscina EH**. Assessing biological and methodological aspects of brain volume loss in multiple sclerosis. *JAMA Neurol* 2018.
11. Sanchez-Dalmau B, **Martinez-Lapiscina EH**, Pulido-Valdeolivas I, Zubizarreta I, Llufríu S, Blanco Y, Sola-Valls N, Sepulveda M, Guerrero A, Alba S, Andorra M, Camos A, Sanchez-Vela L, Alfonso V, Saiz A, Villoslada P. Predictors of vision impairment in Multiple Sclerosis. *PLoS One*. 2018 Apr 17;13(4):e0195856
12. Curbelo J, Romeo JM, Galván-Román JM, Vega-Villar J, **Martinez-Lapiscina EH**, Jiménez-Fonseca P, Villacampa T, Sánchez-Lasheras F, Fernández-Somoano A, Baladrón J. The popularity of neurology in Spain: An analysis of speciality selection. *Neurologia*. 2017 Dec 23.pii: S0213-4853 (17)30361-4. IF: 2.103 Q3
13. Villoslada P, **Martinez-Lapiscina EH**. Time is vision: The importance of the early Discovery and diagnosis of optic neuritis. *Mult Scler*.2017 Dec;23(14):1806-1807. Doi: 10.1177/1352458517739140. No abstract available. IF: 4.84 Q1
14. Sobhanian, M.J., Agarwal, R., Meltzer, E., Kildebeck, E., Frohman, B.S., Frohman, A.N., Galetta, S.L., Saidha, S., White, O., Villoslada, P., Paul, F., Petzold, A., Rennaker, R.L., **Martinez-Lapiscina, E.H.**, Balcer, L.J., Kardon, R., Frohman, E.M., Frohman, T.C., 2018. Identification and treatment of the visual processing asymmetry in MS patients with optic neuritis: The Pulfrich phenomenon. *Journal of the Neurological Sciences* 2018 387, 60–69. IF:2.295 Q3
15. Petzold A; Balcer LJ; Calabresi PA; Costello F; Frohman TC; Frohman EM; **Martinez-Lapiscina EH**; Green AJ; Kardon R; Outteryck O; Paul Friedemann; Schippling S; Vermersch P; Villoslada P; Balk LJ. Retinal layer segmentation in multiple sclerosis: a systematic review and meta-analysis. *Lancet Neurol* 2017. FI: 26.284 [D1-Clinical Neurology (1/193)].

16. Kotelnikova E; Kiani NA; **Martinez-Lapiscina EH**; Andorra M; Zubizarreta I; Pulido-Valdeolivas I; Pertsovskaya I; Alexopoulos LG; Olsson T; Martin R; Paul F; Tegnér J; García-Ojalvo J; Villoslada P. Dynamics and Heterogeneity of Brain Damage in Multiple Sclerosis. *PLOS Computational Biology*. 2017 FI: 4.542 D1
17. Sanchez-Dalmau B; **Martinez-Lapiscina EH**; Torres-Torres R; Ortiz-Perez S; Zubizarreta I; Pulido-Valdeolivas I; Alba-Arbalat S; Guerrero-Zamora A; Calbet D; Villoslada P. Early retinal atrophy predicts long-term visual impairment after acute optic neuritis. *Mult Scler*. 2017 (in press) FI: 4.84 [Q1-Clinical Neurology (27/193)].
18. Alexander U Brandt*; **Martínez-Lapiscina EH***; Rachel Nolan*; Shiv Saidha* [*All authors contributed equally and are listed in alphabetical order]. Monitoring the course of MS with optical coherence tomography. *Curr Treat Options Neurol*. 2017;19(4):15. FI: 2.383 [Q3-Clinical Neurology (103/193)].
19. Sepúlveda M, Fernández-Díez B, **Martínez-Lapiscina EH**, Llufríu S, Sola-Valls N, Zubizarreta I, Blanco Y, Saiz A, Levy D, Glimcher P, Villoslada P. Impairment of decision-making in multiple sclerosis: A neuroeconomic approach. *Mult Scler*. 2016. pii: 1352458516682103. FI: 4.84 [Q1-Clinical Neurology (27/193)].
20. Martínez-Heras E, Solana E, Sola-Valls N, Sepulveda M, Blanco Y, H **Martinez-Lapiscina EH**, Andorra M, Villoslada P, Prats-Galino A, Saiz A. Structural networks involved in attention and executive functions in multiple sclerosis. *Neuroimage Clinical*. 2016 3:288-296FI: 4,348 [Q1-Neuroimaging (3/14)]
21. **Martinez-Lapiscina EH**, Andorra M, Sanchez-Dalmau B, Villoslada P. Phenytoin for neuroprotection. *Lancet Neurol* 2016;5(9): 901-2. FI: 26,284 [D1-Clinical Neurology (1/193)].
22. **Martinez-Lapiscina EH**, Sepulveda M, Torres-Torres R, Alba-Arbalat S, Llufríu S, Blanco Y, Guerrero-Zamora Ana M, Sola-Valls N, Ortiz-Perez S, Villoslada P, Sanchez-Dalmau B Saiz A. Usefulness of optical coherence tomography to distinguish optic neuritis associated with AQP4 or MOG in neuromyelitis optica spectrum disorders. *Ther Adv Neurol Disord* 2016;9(5): 436-440. FI= 4,192 [Q1-Clinical Neurology (80/193)].
23. Cruz-Herranz A, Balk LJ, Oberwahrenbrock T, Saidha S, **Martinez-Lapiscina EH**, Villoslada P, Calabresi PA, Petzold A, Green AJ, Paul F, Brandt AU, Albrecht P. The APOSTEL recommendations for reporting quantitative optical coherence tomography studies. *Neurology* 2016;86(24):2303-9. FI: 8.32 [D1-Clinical Neurology (8/193)].
24. **Martinez-Lapiscina EH**, Arnow S, Wilson JA, Saidha S, Preiningerova JL, Oberwahrenbrock T, Brandt AU, Pablo LE, Guerrieri S, Gonzalez I, Outterlyck O, Mueller AK, Albrecht P, Chan W, Lukas S, Balk LJ, Fraser C, Frederiksen JL, Resto J, Frohman T, Cordano C, Zubizarreta I, Andorra M, Sanchez-Dalmau B, Saiz A, Bermel R, Klistorner A, Petzold A, Schippling S, Costello F, Aktas O, Vermersch P, Oreja-Guevara C, Comi G, Leocani L, Garcia-Martin E, Paul F, Havrdova E, Frohman E, Balcer LJ, Green AJ, Calabresi PA, Villoslada P; IMSVISUAL consortium Retinal thickness measured by optical coherence tomography and risk of disability worsening in multiple sclerosis. *Lancet Neurol* 2016;15(6):574-84. FI: 26.284 [D1-Clinical Neurology (1/193)].
25. Ortiz-Pérez S, Andorra M, Torres-Torres R, Calbet D, Lampert EJ, Alba-Arbalat S, Guerrero Zamora AM, Zubizarreta I, Sola-Valls N, Llufríu S, Sepúlveda M, Saiz A, Sánchez-Dalmau B, Villoslada P, **Martínez-Lapiscina EH**. Visual Field Impairment captures disease burden in Multiple Sclerosis. *J Neurol*. 2016; 263(4):695-702. FI: 3.389 [Q2-Clinical Neurology (51/193)].
26. Martínez-González MA, Zazpe I, Razquin C, Sánchez-Tainta A, Corella D, Salas-Salvadó J, Toledo E, Ros E, Muñoz MÁ, Recondo J, Gómez-Gracia E, Fiol M, Lapetra J, Buil-Cosiales P, Serra-Majem L, Pinto X, Schröder H, Tur JA, Sorlí JV, Lamuela-Raventós RM, Estruch R; PREDIMED GROUP including **Martínez-Lapiscina EH**. Empirically derived food patterns and the risk of total mortality and cardiovascular events in the PREDIMED study. *Clin Nutr*. 2015;34(5):859-67 FI=4.548 [Q1- Nutrition & Dietetics (10/80)]
27. Sala-Vila A, Guasch-Ferré M, Hu FB, Sánchez-Tainta A, Bulló M, Serra-Mir M, López-Sabater C, Sorlí JV, Arós F, Fiol M, Muñoz MA, Serra-Majem L, Martínez JA, Corella D, Fitó M, Salas-Salvadó J, Martínez-González MA, Estruch R, Ros E; PREDIMED Investigators, including **Martínez-Lapiscina EH**. Dietary α -Linolenic Acid, Marine ω -3 Fatty Acids, and Mortality in a Population With High Fish Consumption: Findings From the PREvención con Dieta MEDiterránea (PREDIMED) Study. *J Am Heart Assoc*. 2016 FI: 4.425 [Q2-Cardiac & Cardiovascular Systems (18/124)].
28. Eguaras S, Toledo E, Buil-Cosiales P, Salas-Salvadó J, Corella D, Gutierrez-Bedmar M, Santos-Lozano JM, Arós F, Fiol M, Fitó M, Ros E, Serra-Majem L, Pintó X, Martínez JA, Sorlí

- JV, Muñoz MA, Basora J, Estruch R, Martínez-González MÁ; PREDIMED Investigators including **Martínez-Lapiscina EH**. Does the Mediterranean diet counteract the adverse effects of abdominal adiposity? *Nutr Metab Cardiovasc Dis*. 2015;25(6):569-74. IF 3.679 [Q1-Nutrition&Dietetics (22/80)]
29. Díaz-López A, Babio N, Martínez-González MA, Corella D, Amor AJ, Fitó M, Estruch R, Arós F, Gómez-Gracia E, Fiol M, Lapetra J, Serra-Majem L, Basora J, Basterra-Gortari FJ, Zanon-Moreno V, Muñoz MÁ, Salas-Salvadó J AND PREDIMED Study Investigators including **Martínez-Lapiscina EH**. Mediterranean Diet, Retinopathy, Nephropathy, and Microvascular Diabetes Complications: A Post Hoc Analysis of a Randomized Trial. *Diabetes Care*. 2015;38(11):2134-41 FI 11.857 [D1-Endocrinology & Metabolism (7/133)].
30. Eloy Martínez-Heras; Federico Varriano; Vesna Prckovska; Carlos Laredo; Magi Andorra; **Elena H. Martínez-Lapiscina**; Anna Calvo; Pablo Villoslada; Albert Saiz; Alberto Prats-Galino; Sara Llufríu. Improved framework for tractography reconstruction of the optic radiation. *PLoS One*. 2015;10(9):e0137064 IF 2.806 [Q1-Multidisciplinary Sciences (11/63)].
31. Sepúlveda M; Ros C; **Martínez-Lapiscina EH**; Solà-Valls N; Hervàs M; Llufríu S; Blanco Y; La Puma D; Villoslada P; Casals E; Graus F; Castedo-Branco C; Saiz A. Pituitary-ovary axis and ovarian reserve in fertile women with multiple sclerosis: a pilot study. *Mult Scler*. 2016;22(4):564-8. FI: 4.84 [Q1-Clinical Neurology (27/193)].
32. Elena Abad; Jorge Sepulcre; **Elena H Martínez-Lapiscina**; Irati Zubizarreta; Jordi Garcia-Ojalvo; Pablo Villoslada. The analysis of semantic networks in multiple sclerosis identifies preferential damage of long-range connectivity. *Mult Scler Relat Disord*. 2015;4 (5):387-94. FI: 2.349 [Q3-Clinical Neurology (162/193)].
33. Lampert EJ, Andorra M, Torres-Torres R, Ortiz-Pérez S, Llufríu S, Sepúlveda M, Sola N, Saiz A, Sánchez-Dalmau B, Villoslada P, **Martínez-Lapiscina EH**. Color vision impairment in multiple sclerosis points to retinal ganglion cell damage. *J Neurol*. 2015;262 (11):2491-7 FI: 3.389 [Q2-Clinical Neurology (51/193)].
34. Valls-Pedret, C; Sala-Vila, A; Serra-Mir, M; Corella, D; de la Torre, R; Martínez-González, MA; **Martínez-Lapiscina, EH**; Fitó, M; Pérez-Heras, A; Salas-Salvadó, J; Estruch, E; Ros, E. MEDITERRANEAN DIET and AGE-RELATED COGNITIVE DECLINE: A Randomized Clinical Trial. *JAMA Intern Med*. 2015;175(7):1094-103. IF: 16.538 [D1-Medicine, General & Internal (6/155)].
35. Sola-Valls N, Blanco Y, Sepúlveda M, Llufríu S, **Martínez-Lapiscina EH**, La Puma D, Graus F, Villoslada P, Saiz A. Walking function in clinical monitoring of multiple sclerosis by telemedicine. *J Neurol*. 2015;262(7):1706-13. FI: 3.389 [Q2-Clinical Neurology (51/193)].
36. Malhotra A, Gündel M, Rajput AM, Mevissen HT, Saiz A, Pastor X, Lozano-Rubi R, **Martínez-Lapiscina EH**, Zubizarreta I, Mueller B, Kotelnikova E, Toldo L, Hofmann-Apitius M, Villoslada P. Knowledge retrieval from PubMed abstracts and electronic medical records with the Multiple Sclerosis Ontology. *PLoS One*. 2015;10(2):e0116718. IF 2.806 [Q1-Multidisciplinary Sciences (11/63)].
37. Gabilondo I, **Martínez-Lapiscina EH**, Fraga-Pumar E, Ortiz-Perez S, Torres-Torres R, Andorra M, Llufríu S, Zubizarreta I, Saiz A, Sanchez-Dalmau B, Villoslada P. Dynamics of retinal injury after acute optic neuritis. *Ann Neurol*. 2015; 77(3): 517-28 IF 9.89. [D1-Clinical Neurology (6/193)].
38. Martínez-González MÁ, Toledo E, Arós F, Fiol M, Corella D, Salas-Salvadó J, Ros E, Covas MI, Fernández-Crehuet J, Lapetra J, Muñoz MA, Fitó M, Serra-Majem L, Pintó X, Lamuela-Raventós RM, Sorlí JV, Babio N, Buil-Cosiales P, Ruiz-Gutierrez V, Estruch R, Alonso A AND PREDIMED **Study Investigators including Martínez-Lapiscina EH**. Extravirgin olive oil consumption reduces risk of atrial fibrillation: the PREDIMED (Prevención con Dieta Mediterránea) trial. *Circulation*. 2014;130:18-26. IF 19.309 [D1-Cardiac & Cardiovascular Systems (2/124)].
39. **Martínez-Lapiscina EH**, Fraga-Pumar E, Gabilondo I, Martínez-Heras E, Torres-Torres R, Ortiz-Pérez S, Llufríu S, Tercero A, Andorra M, Roca MF, Lampert E, Zubizarreta I, Saiz A, Sanchez-Dalmau B, Villoslada P. The multiple sclerosis visual pathway cohort: understanding neurodegeneration in MS. *BMC Res Notes*. 2014;7:910.
40. **Martínez-Lapiscina EH**, Sanchez-Dalmau B, Fraga-Pumar E, Ortiz-Perez S, Tercero-Urbe AI, Torres-Torres R, Villoslada P. The visual pathway as a model to understand brain damage in multiple sclerosis. *Mult Scler*. 2014;20:1678-85. FI: 4.84 [Q1-Clinical Neurology (27/193)].
41. **Martínez-Lapiscina EH**, Fraga-Pumar E, Pastor X, Gómez M, Conesa A, Lozano-Rubí R, Sánchez-Dalmau B, Alonso A, Villoslada P. Is the incidence of optic neuritis rising? Evidence

- from an epidemiological study in Barcelona (Spain), 2008-2012. *J Neurol*. 2014;261:759-67 FI: 3.389 [Q2-Clinical Neurology (51/193)].
42. **Martínez-Lapiscina EH**, Ortiz-Pérez S, Fraga-Pumar E, Martínez-Heras E, Gabilondo I, Llufríu S, Bullich S, Figueras M, Saiz A, Sánchez-Dalmau B, Villoslada P. Colour vision impairment is associated with disease severity in multiple sclerosis. *Mult Scler*. 2014;20(9):1207-1216 FI: 4.84 [Q1-Clinical Neurology (27/193)].
 43. Gabilondo I, **Martínez-Lapiscina EH**, Martínez-Heras E, Fraga-Pumar E, Llufríu S, Ortiz S, Bullich S, Sepulveda M, Falcon C, Berenguer J, Saiz A, Sanchez-Dalmau B, Villoslada P. Trans-synaptic axonal degeneration in the visual pathway in multiple sclerosis. *Ann Neurol*. 2014;75: 98-107. IF 9.89. [D1-Clinical Neurology (6/193)].
 44. **Martínez-Lapiscina EH**, Galbete C, Corella D, Toledo E, Buil-Cosiales P, Salas-Salvado J, Ros E, Martínez-González MA. Genotype patterns at CLU, CR1, PICALM and APOE, cognition and Mediterranean diet: the PREDIMED- NAVARRA trial. *Genes Nutr*. 2014;9:393. FI: 2.797 [Q2-Nutrition & Dietetics (41/80)].
 45. Gea A, Beunza JJ, Estruch R, Sánchez-Villegas A, Salas-Salvadó J, Buil-Cosiales P, Gómez-Gracia E, Covas MI, Corella D, Fiol M, Arós F, Lapetra J, Lamuela-Raventos RM, Warnberg J, Pintó X, Serra-Majem L, Martínez-González MA AND PREDIMED Study Investigators including **Martínez-Lapiscina EH** Alcohol intake, wine consumption and the development of depression: the PREDIMED study. *BMC Med*. 2013; 30;11:192 FI: 8.097 [D1-Medicine, General & Internal (8/155)]
 46. Marro M, Taubes A, Abernathy A, Balint S, Moreno B, Sanchez-Dalmau B, **Martínez-Lapiscina EH**, Amat-Roldan I, Petrov D, Villoslada P. Dynamic molecular monitoring of retina inflammation by in vivo Raman spectroscopy coupled with multivariate analysis. *J Biophotonics*. 2014;7(9):724-34 FI: 4.328 [Q1-Optics (10/90)].
 47. Santiago Ortiz-Pérez*, **Martínez-Lapiscina EH***, Iñigo Gabilondo, Elena Fraga-Pumar, Eloy Martínez-Heras, Albert Saiz, Bernardo Sánchez-Dalmau, and Pablo Villoslada. Retinal periphlebitis is associated with Multiple Sclerosis severity. *Neurology* 2013;81:877-81. *Equally author contributions. FI: 8.32 [D1-Clinical Neurology (8/193)].
 48. Gabilondo I, Sepulveda M, Ortiz-Pérez S, Fraga-Pumar E, **Martínez-Lapiscina EH**, Llufríu S, Solá N, Saiz A, Sánchez-Dalmau B, Villoslada P. Retrograde retinal damage after acute optic tract lesion in MS. *J Neurol Neurosurg Psychiatry*. 2013;84:824-6. FI: 7.349 [Q1-Clinical Neurology (21/193)] & [D1-Surgery (4/199)]
 49. Estruch R, Ros E, Salas-Salvadó J, Covas MI, Corella D, Arós F, Gómez-Gracia E, Ruiz-Gutiérrez V, Fiol M, Lapetra J, Lamuela-Raventos RM, Serra-Majem L, Pintó X, Basora J, Muñoz MA, Sorlí JV, Martínez JA, Martínez-González MA AND **PREDIMED Study Investigators including Martínez-Lapiscina EH**. Primary prevention of cardiovascular disease with a Mediterranean diet. *N Engl J Med*. 2013;368:1279-90. A FI: 72.406 [D1-Medicine, General & Internal (1/155)]
 50. **Martínez-Lapiscina EH**, Clavero P, Toledo E, Sanjulian B, Sanchez-Tainta A, Corella D, Lamuela-Raventos RM, Martínez JA, Martínez-González MA. Virgin olive oil supplementation and long-term cognition: the PREDIMED-NAVARRA randomized, trial. *J Nutr Health Aging*. 2013;17: 544-52. IF 2.772 [Q2-Nutrition & Dietetics (29/80)]
 51. **Martínez-Lapiscina EH**, Clavero P, Toledo E, Estruch R, Salas-Salvadó J, Sanjulian B, Sanchez-Tainta A, Ros E, Valls-Pedret C, Martínez-González MA. Mediterranean diet improves cognition: The PREDIMED-NAVARRA randomized trial. *J Neurol Neurosurg Psychiatry* 2013;84:1318-25 FI: 7.349 [Q1-Clinical Neurology (21/193)] & [D1-Surgery (4/199)]
 52. Martínez-González MA, **Martínez-Lapiscina EH**, Clavero P, Toledo E, Estruch R, Salas-Salvadó J, Sanjulian B, Sanchez-Tainta A, Ros E, Valls-Pedret C Replay to Discordant effects on anxiety and depression of Mediterranean diet and of physical activity enhancement. *J Neurol Neurosurg Psychiatry*. 2013. FI: 7.349 [Q1-Clinical Neurology (21/193)] & [D1-Surgery (4/199)] <http://jnnp.bmj.com/content/early/2013/04/19/jnnp-2012-304792/reply>
 53. **Martínez-Lapiscina EH**, Ayuso T, Lacruz F, Gurtubay IG, Soriano G, Otano M, Bujanda M, Bacaicoa MC. Cortico-juxtacortical involvement increases risk of epileptic seizures in multiple sclerosis. *Acta Neurol Scand*. 2013;128:24-31 IF 3.087 [Q2-Clinical Neurology (84/193)].
 54. **Martínez-Lapiscina EH**, Lacruz F, Bolado-Concejo F, Rodríguez-Pérez I, Ayuso T, Garaigorta M, Urman J. Natalizumab-induced autoimmune hepatitis in a patient with multiple sclerosis. *Mult Scler*. 2013;19:1234-5. FI: 4.84 [Q1-Clinical Neurology (22/192)].

55. **Martínez-Lapiscina EH**, Erro Aguirre ME, Ayuso Blanco T, Jericó Pascual I. Myasthenia gravis: sleep quality, quality of life and disease severity. *Muscle Nerve*. 2012;46:174-80 IF 2.605 [Q2-Clinical Neurology (73/193)].
56. **Martínez-Lapiscina EH**, Erro ME, Cabada T, Tuñón T. 5-fluorouracil induced hyperammonemic encephalopathy: etiopathological correlation. *Can J Neurol Sci*. 2012;39:553-4. IF=0.952 [Q4-Clinical Neurology (171/193)].
57. **Martínez-Lapiscina EH**, Pulido L, Erro E. Motor fluctuations in Parkinson Diseases, a therapeutic approach. *Rev Neurol*, 2012;52:S25-S32. IF: 0.743 [Q4-Clinical Neurology (180/193)].
58. **Martínez-Lapiscina EH**, García MP, Alegría MB. Reply to the letter to the editor by Lucena Romero et al on the article "Epileptic seizure and lipoma of corpus callosum: cause or incidental finding". *Neurología*. 2012;2: 58-9. IF 2.103 [Q3-Clinical Neurology (125/193)].
59. **Martínez-González MA**, García-Lopez M, Bes-Rastrollo M, Toledo E, **Martínez-Lapiscina EH**, Vazquez Z, Benito S, Beunza JJ. Mediterranean diet and the incidence of cardiovascular disease: A Spanish cohort. *Nutr Metab Cardiovasc Dis*. 2011;21:237- 44 IF 3.679 [Q1-Nutrition&Dietetics (22/80)]
60. **Martínez-Lapiscina EH**, García MP, Alegría MB. Epileptic seizure and lipoma of corpus callosum: cause or incidental finding. *Neurología*. 2010;25:331-2. IF 2.103 [Q3-Clinical Neurology (125/193)].
61. **Martínez-Lapiscina EH**, Marçal Pimenta A, Beunza JJ, Bes-Rastrollo M, J Alfredo Martínez J, Martínez-González MA. Nut consumption and incidence of hypertension: the SUN prospective cohort. *Nutr Metab Cardiovasc Dis*. 2010;20:359-65. IF 3.679 [Q2-Nutrition&Dietetics (22/80)]
62. **Martínez-Lapiscina EH**, Martínez-González MA, Guillén-Grima F, Olmo N, Zarranz- Ventura J, Moreno-Montañés J. Dietary fat intake and incidence of cataracts: The SUN Prospective study in the cohort of Navarra, Spain. *Med Clin* 2010;134:194-201. IF 1.125 [Q3-Medicine, General & Internal (76/155)]

RESEARCH SUPPORT (2012-2019)

Title: Vía visual aferente: innovación para trastorno del sueño REM y Parkinson [PI17/01228]

Financial Entity: Instituto de Salud Carlos III

Role: Principal Investigator

Duration: 1 January 2018 - 31 December 2020. On April 2019, delegated to another PI due to change of appointment

Principal investigator: Elena H Martinez-Lapiscina

Budget: 54.450,00 €

Title: Alemtuzumab: moving forward, from CARE-MS to NEUROPRESERVE in MS

Financial Entity: Sanofi Genzyme

Role: Principal Investigator and Coordinator

Duration: 1 January 2018 - 31 December 2021. On April 2019, delegated to another PI due to change of appointment

Principal investigator: Elena H Martinez-Lapiscina

Budget: 342,620.92 €

Title: Multiple Sclerosis Spanish Network "Red Española de Esclerosis Múltiple"

Financial Entity: Instituto de Salud Carlos III. Fondo de Investigaciones Sanitarias Retic_16 RD16/0015/0003

Duration: 1 January 2017 - 31 December 2020. On April 2019, delegated to another PI due to change of appointment

Role: Investigator

Principal investigators: Villoslada, P // Martinez-Lapiscina EH

Budget: 162.250€

Title: Juan Rodés

Financial Entity: Instituto de Salud Carlos III Juan Rodés JR16/00006

Duration: 1 January 2017 – 16 April 2019

Role: Principal Investigator

Principal investigator: Martinez-Lapiscina, EH.

Budget: 135.000€ (direct costs)

Title: M-AES MV17/00021

Financial Entity: Instituto de Salud Carlos III M-AES asociado a RH

Duration: 01 February 2018 -30 April 2018

Role: exchange program associated to JR16/00006

Principal investigator: Martinez-Lapiscina EH

Budget: € 5.785€ (direct costs)

Title: Multiple manifestations of genetic and non-genetic factors in Multiple Sclerosis disentangled with a multi-omics approach to accelerate personalized medicine

Financial Entity: European Commission

Duration: 1 January 2017 – 16 April 2019

Role: Principal Investigator

Budget: 301.403,75€

Title: Retinal molecular imaging in MS by Raman Spectroscopy to quantify inflammatory and neurodegenerative activity in MS

Financial Entity: Merck Serono [Grant for Multiple Sclerosis Innovation (GMSI)]

Duration: 1 January 2017 - 31 December 2019. On April 2019, delegated to another PI due to change of appointment

Role: Principal Investigator

Principal investigator: Martinez-Lapiscina, EH

Budget: 249.980€

Title: Estudio del daño axonal en esclerosis múltiple mediante estudios de neuroimagen de la vía óptica

Financial Entity: Instituto de Salud Carlos III, Fondo de Investigaciones Sanitarias, PI15/00061

Duration: 01 January 2016 - 31 December 2018

Role: Investigator

Principal investigator: Villoslada, P

Budget: € 110.715

Title: Personalizing health care in multiple sclerosis using systems medicine tools

Financial Entity: Instituto de Salud Carlos III Fondo Investigaciones Sanitarias AC_15

Duration: 01 January 2016 - 31 December 2018

Role: Investigator

Principal investigator: Villoslada, P

Budget: € 149.979,50

Title: Functional Imaging of the retina in patients with relapsing-remitting multiple sclerosis by multifocal electroretinography

Financial Entity: Genzyme Corporation

Duration: 11 December 2015 - 01 October 2017

Role: Investigator

Principal investigator: Sánchez-Dalmau, B

Budget: 118.522€

Title: Rio Hortega

Financial Entity: Instituto de Salud Carlos III Rio Hortega CM13/00150

Duration: 01 January 2014 - 31 December 2015

Role: Fellowship scholar

Principal investigator: Martinez-Lapiscina EH

Budget: 53.732 €

Title: M-AES MV/1500012

Financial Entity: Instituto de Salud Carlos III M-AES asociado a RH

Duration: 01 July 2015 -30 September 2015

Role: exchange program associated to CM13/00150

Principal investigator: Martinez-Lapiscina EH

Budget: € 6.000

Title: Development and validation of an innovative, comprehensive measuring system for disease progression in MS & The International MS Visual System Consortium (IMSVISUAL).

Financial Entity: International Progressive MS Alliance

Duration: 01 August 2015 -01 August 2016

Role: Investigator

Principal investigator: Villoslada, P

Budget: Total €7,000

Title: Molecular imaging of the retina in patients with multiple sclerosis by Raman spectroscopy 20142030

Financial Entity: Fundació La Marató TV3

Duration: 03 June 2015 - 02 June 2018

Role: Principal Investigator and Coordinator (two centres)

Principal investigator: Elena H Martínez-Lapiscina

Budget: €300.000 [€150.000 our center]

Title: Advancing human antigen-specific t-regulatory cell expanding nanomedicines for autoimmune disease: translational studies in humanized mice.

Financial Entity: Instituto de Salud Carlos III Fondo Investigaciones Sanitarias Excelencia 2014

Duration: 01 January 2015 - 31 December 2017

Role: Investigator

Principal investigator: Villoslada, P

Budget: €605.000

Title: Molecular imaging of the retina in patients with Multiple Sclerosis by using a Raman Spectrofotometer CMSmera coupled to Scanning Laser Ophthalmoscope.

Financial Entity: Biogen Iberia Idec SL

Duration: 27 November 2014 - 31 December 2016

Role: Investigator

Principal investigator: Villoslada, P

Budget: €60.000

Title: A randomized, double blind, parallel-group, placebo-controlled study to assess the efficacy, safety, tolerability and pharmacokinetics of BIIB033 in subjects with first episodes of acute optic neuritis

Financial Entity: Biogen Idec Research Limited

Duration: 21 August 2013 - 21 January 2016

Role: Investigator

Principal investigator: Sanchez-Dalmau, B

Budget: 9.333,83€

Title: Multiple Sclerosis Spanish Network "Red Española de Esclerosis Múltiple"

Financial Entity: Instituto de Salud Carlos III. Fondo de Investigaciones Sanitarias Retic_07 RD07/0060/0001

Duration: 01 January 2008 - 31 December 2014

Role: Investigator

Principal investigator: Villoslada, P

Budget: €589.671,73

Title: Multiple Sclerosis Spanish Network "Red Española de Esclerosis Múltiple"

Financial Entity: Instituto de Salud Carlos III. Fondo de Investigaciones Sanitarias Retic_12 RD12/0032/0001

Duration: 01 January 2013 - 31 December 2016

Role: Investigator

Principal investigator: Villoslada, P

Budget: € 463.590

Elena H Martínez-Lapiscina MD PhD
June 4th 2019

ORCID: 0000-0003-4272-0826
Research ID: L-1161-2014

Title: A 3-year, multi-center study to evaluate optical coherence tomography as an outcome measure in patients with multiple sclerosis

Financial Entity: Novartis.

Duration: 24 February 2012 – 24 March 2016

Role: Investigator

Principal investigator: Villoslada, P

Budget: 217.500€