

## BIOGRAPHICAL SKETCH

Name: <i>[Last, First, Middle Initial(s), Degree(s)]</i> Comabella, Manuel. MD, PhD	Position/Title: Neurologist. Neurology / Neuroimmunology Department. Vall d'Hebron University Hospital. Director of Laboratory. MS Centre of Catalonia. Vall d'Hebron University Hospital.
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### Education

[Begin with baccalaureate or other professional education and include postdoctoral training]

Institution and Location	Degree	Year Conferred	Field of Study
Facultat de Medicina, Universitat de Barcelona	MD	1990	Medicine and Surgery
Residence in Neurology	Neurologist	1995	Neurology
Facultat de Medicina, Universitat Autònoma de Barcelona	PhD	2013	Medicine

### Research and Professional Experience

[List in chronological order, previous employment, experience and honors]

- 2015 – Coordinator of the BioMSeu (European Consortium for CSF Biomarker Research; <http://www.biomseu.com>)
- 2013 – Coordinator of Neurosciences. Fundació Institut de Recerca Hospital Vall d'Hebron, Universitat Autònoma de Barcelona, Barcelona, Spain
- 2013 – Member of the Internal Scientific Committee. Fundació Institut de Recerca Hospital Vall d'Hebron, Universitat Autònoma de Barcelona, Barcelona, Spain
- 2008 – Senior neurologist. Neurology / Neuroimmunology Department, Vall d'Hebron University Hospital. Barcelona, Spain
- 2004 – Director of Laboratory. MS Centre of Catalonia, Neurology / Neuroimmunology Department, Vall d'Hebron University Hospital. Barcelona, Spain
- 1999 – 2003 Research Neurologist. Vall d'Hebron University Hospital. Barcelona, Spain
- 1996 – 1998 Research fellowship in Neuroimmunology, Brigham and Women's Hospital - Center for Neurologic Diseases, Harvard Medical School, Boston (US)
- 1992 – 1995 Neurology Resident (MIR Program), Vall d'Hebron University Hospital. Barcelona, Spain

## Publications

For each investigator, provide complete bibliographic citations for selected **publications related to the topic of this application**. DO NOT exceed one page for each individual.

1. **Comabella M**, Cantó E, Nurtidinov R, Río J, Villar LM, Picón C, Castelló J, Fissolo N, Aymerich X, Auger C, Rovira A, Montalban X. MRI phenotypes with high neurodegeneration are associated with peripheral blood B-cell changes. *Hum Mol Genet.* 2016 Jan 15;25(2):308-16.
2. Borrás E, Cantó E, Choi M, María Villar L, Álvarez-Cermeño JC, Chiva C, Montalban X, Vitek O, **Comabella M**, Sabidó E. Protein-Based Classifier to Predict Conversion from Clinically Isolated Syndrome to Multiple Sclerosis. *Mol Cell Proteomics.* 2016 Jan;15(1):318-28.
3. Cantó E, Tintoré M, Villar LM, Costa C, Nurtidinov R, Álvarez-Cermeño JC, Arrambide G, Reverter F, Deisenhammer F, Hegen H, Khademi M, Olsson T, Tumani H, Rodríguez-Martín E, Piehl F, Bartos A, Zimova D, Kotoucová J, Kuhle J, Kappos L, García-Merino JA, Sánchez AJ, Saiz A, Blanco Y, Hintzen R, Jafari N, Brassat D, Lauda F, Roesler R, Rejdak K, Papuc E, de Andrés C, Rauch S, Khalil M, Enzinger C, Galimberti D, Scarpini E, Teunissen C, Sánchez A, Rovira A, Montalban X, **Comabella M**. Chitinase 3-like 1: prognostic biomarker in clinically isolated syndromes. *Brain.* 2015 Apr;138(Pt 4):918-31.
4. Malhotra S, Río J, Urcelay E, Nurtidinov R, Bustamante MF, Fernández O, Oliver B, Zettl U, Brassat D, Killestein J, Lechner-Scott J, Drulovic J, Chan A, Martinelli-Boneschi F, García-Merino A, Montalban X, **Comabella M**. NLRP3 inflammasome is associated with the response to IFN- $\beta$  in patients with multiple sclerosis. *Brain.* 2015 Mar;138(Pt 3):644-52.
5. Cantó E, Espejo C, Costa C, Montalban X, **Comabella M**. Breast regression protein-39 is not required for experimental autoimmune encephalomyelitis induction. *Clin Immunol.* 2015 Oct;160(2):133-41.
6. Cantó E, Tintoré M, Villar LM, Borrás E, Alvarez-Cermeño JC, Chiva C, Sabidó E, Rovira A, Montalban X, **Comabella M**. Validation of semaphorin 7A and ala- $\beta$ -his-dipeptidase as biomarkers associated with the conversion from clinically isolated syndrome to multiple sclerosis. *J Neuroinflammation.* 2014 Nov 13;11:181.
7. Liu Y, Carlsson R, **Comabella M**, Wang J, Kosicki M, Carrion B, Hasan M, Wu X, Montalban X, Dziegiel MH, Sellebjerg F, Sørensen PS, Helin K, Issazadeh-Navikas S. FoxA1 directs the lineage and immunosuppressive properties of a novel regulatory T cell population in EAE and MS. *Nat Med.* 2014 Mar;20(3):272-82.
8. **Comabella M**, Montalban X. Body fluid biomarkers in multiple sclerosis. *Lancet Neurol.* 2014 Jan;13(1):113-26.
9. **Comabella M**, Caminero AB, Malhotra S, Agulló L, Fernández O, Reverter F, Vandenberg K, Rodríguez-Antigüedad A, Matesanz F, Izquierdo G, Urcelay E, López-Larios A, Sánchez A, Otero S, Tintoré M, Montalban X. TNFRSF1A polymorphisms rs1800693 and rs4149584 in patients with multiple sclerosis. *Neurology.* 2013 May 28;80(22):2010-6.
10. Fissolo N, Costa C, Nurtidinov RN, Bustamante MF, Lombart V, Mansilla MJ, Espejo C, Montalban X, **Comabella M**. Treatment with MOG-DNA vaccines induces CD4+CD25+FoxP3+ regulatory T cells and up-regulates genes with neuroprotective functions in experimental autoimmune encephalomyelitis. *J Neuroinflammation.* 2012 Jun 22;9:139.
11. Chan A, Pirmohamed M, **Comabella M**. Pharmacogenomics in neurology: current state and future steps. *Ann Neurol.* 2011 Nov;70(5):684-97.
12. Bustamante MF, Fissolo N, Río J, Espejo C, Costa C, Mansilla MJ, Lizasoain I, Moro MA, Carmen Edo M, Montalban X, **Comabella M**. Implication of the Toll-like receptor 4 pathway in the response to interferon- $\beta$  in multiple sclerosis. *Ann Neurol.* 2011 Oct;70(4):634-45.
13. **Comabella M**, Fernández M, Martín R, Rivera-Vallvé S, Borrás E, Chiva C, Julià E, Rovira A, Cantó E, Alvarez-Cermeño JC, Villar LM, Tintoré M, Montalban X. Cerebrospinal fluid chitinase 3-like 1 levels are associated with conversion to multiple sclerosis. *Brain.* 2010 Apr;133(Pt 4):1082-93.
14. Lünemann JD, Tintoré M, Messmer B, Strowig T, Rovira A, Perkal H, Caballero E, Münz C, Montalban X, **Comabella M**. Elevated Epstein-Barr virus-encoded nuclear antigen-1 immune responses predict conversion to multiple sclerosis. *Ann Neurol.* 2010 Feb;67(2):159-69.
15. Camiña-Tato M, Morcillo-Suárez C, Bustamante MF, Ortega I, Navarro A, Muntasell A, López-Botet M, Sánchez A, Carmona P, Julià E, Tortola MT, Audí L, Oksenberg JR, Martín R, Montalban X, **Comabella M**. Gender-associated differences of perforin polymorphisms in the susceptibility to multiple sclerosis. *J Immunol.* 2010 Nov 1;185(9):5392-404.
16. **Comabella M**, Lünemann JD, Río J, Sánchez A, López C, Julià E, Fernández M, Nonell L, Camiña-Tato M, Deisenhammer F, Caballero E, Tortola MT, Prinz M, Montalban X, Martín R. A type I interferon signature in monocytes is associated with poor response to interferon-beta in multiple sclerosis. *Brain.* 2009 Dec;132(Pt 12):3353-65.
17. **Comabella M**, Craig DW, Morcillo-Suárez C, Río J, Navarro A, Fernández M, Martín R, Montalban X. Genome-wide scan of 500,000 single-nucleotide polymorphisms among responders and nonresponders to interferon beta therapy in multiple sclerosis. *Arch Neurol.* 2009 Aug;66(8):972-8.