

CURRICULUM VITAE



Name: Luca Battistini
Date of Birth: March 2nd, 1964
Place of birth: Genova (Italy)

ACADEMIC DEGREES

1983 Scientific Diploma, Liceo Tolomei, Siena
1989 Medical Doctor Degree (110/110 Cum Laude), University of Siena, Siena
1990 Head of the Health Unit, Medical Officer, Italian Army
1994 Specialist in Neurology Università "La Sapienza" of Rome, Rome
2000 P.hD. Degree in Neurophysiopatology, Università of Florence, Florence

MEMBERSHIPS

1989- Member of the "Società Italiana di Neurologia" (SIN)
1992- Founder of the "Associazione Italiana di Neuroimmunologia" (AINI)
1993- Member of the "Associazione Internazionale di Neuroimmunologia" (ISNI)
1993- Member of the "American Academy of Neurology" (AAN)
1993- Member of the "Società Italiana d'Immunologia, Immunol. Clin. e Allerg." (SIICA)
2002- Founder of the "Società Italiana di Citometria Clinica e Sperimentale" (SICiCS)

FELLOWSHIPS

1993 Fellowship awarded by "Ministero dell'Università e Ricerca Italiana" (MURST)
1994 Fellowship awarded by "Associazione Italiana Sclerosi Multipla" (AISM - Italy)
1995 Fellowship awarded by National Multiple Sclerosis Society (NMSS - USA)

SCIENTIFIC AWARDS

2002 "Rita Levi Montalcini" Best Young Investigator Award, Fondazione Italiana Sclerosi Multipla (FISM)

RESEARCH ACTIVITIES

1990-1992 Research fellow, Istituto di Neurobiologia, Consiglio Nazionale delle Ricerche (CNR), Roma.
1993-1995 Research Associate, Dept. of Neuropathology, Albert Einstein College of Medicine, NY, USA
1995-1997 Instructor of Neurology (Faculty level), Harvard Medical School, Boston, MA, USA.
1997- present Head, Neuroimmunology Unit, Experimental Neuroscience Dept., Fondazione Santa Lucia, Rome, Italy

PATENTS

- Publication number: EP1501505 (A1) Publication date: 2005-02-02
Battistini L., Borsellino G., De santis R., Carminati P. “ Use of 3-(2-ethylphenyl)-S-methoxy-1H-1,2,4-triazole for the treatment of autoimmune diseases “WO2818-101
- European Patent Application No. 04 745 177.8 – 2404
Battistini L. Borsellino G., Diamantini A. “Use of multiparametric flow cytometry for the diagnosis, prognosis and immunotherapy validation of autoimmune and oncohematologic disorders “

TEACHING AND DIDACTIC ACTIVITY

- 1995-1996-1997 Instructor of Neurology, Harvard Medical School, Boston, MA, USA
- 2000-present Professor of Immunology, University of Rome “Tor Vergata”, Italy.

EDITORIAL and SCIENTIFIC BOARDS

- 2004-2007 Member of the Scientific Board of the Associazione Italiana di Neuroimmunologia (AINI)
- 2010-present Member of the Scientific Board of the Fondazione Italiana per la Sclerosi Multipla (FISM)

Scientific Reviewer for:

- the “Istituto Superiore di Sanità” (ISS), Italy
- the UK MS Society Grant Panel
- the “Human Frontier Science Program” (HFSP)
- the “Ministero dell’Università e della Ricerca Scientifica” (MIUR), Italy
- the “Ministero della Salute”, Italy
- the “Fondation ARSEP - French MS Research Society”, France
- the “Wellcome Trust”, UK
- the “National Multiple Sclerosis Society” (NMSS), USA
- Annals of Neurology
- Brain
- European Journal of Immunology
- Journal of Neuroimmunology
- Journal of Immunology
- Multiple Sclerosis
- Journal of Autoimmunity
- Blood

MEETINGS

- Chairman of the Scientific Committee, Workshop “Pathogenic and Regulatory Cells in Demyelinating Diseases”. Rome, 12-15 September 1999.
- Chairman of the Organizing Committee, VII International Congress, International Society of Neuroimmunology (ISNI). Venice (Italy), September 2004.

SELECTED PUBLICATIONS (last 5 years):

- 1: Angelini DF, Serafini B, Piras E, et al. Increased CD8+ T Cell Response to EBV Lytic Antigens in the Active Phase of Multiple Sclerosis.
PLoS Pathog. 2013 Apr;9(4):e1003220.
- 2: Mozzetta C, Consalvi S, Saccone V, Tierney M, Diamantini A, Mitchell KJ, Marazzi G, Borsellino G, Battistini L, Sassoon D, Sacco A, Puri PL. Fibroadipogenic progenitors mediate the ability of HDAC inhibitors to promote regeneration in dystrophic muscles of young, but not old Mdx mice.
EMBO Mol Med. 2013 Mar 18. doi: 10.1002/emmm.201202096. [Epub ahead of print]
- 3: Chiurchiù V, Cencioni MT, Bisicchia E, De Bardi M, Gasperini C, Borsellino G, Centonze D, Battistini L, Maccarrone M. Distinct modulation of human myeloid and plasmacytoid dendritic cells by anandamide in multiple sclerosis.
Ann Neurol. 2013 Feb 27. doi: 10.1002/ana.23875. [Epub ahead of print] PubMed
- 4: Bisicchia E, Chiurchiù V, Viscomi MT, Latini L, Fezza F, Battistini L, Maccarrone M, Molinari M. Activation of type-2 cannabinoid receptor inhibits neuroprotective and antiinflammatory actions of glucocorticoid receptor α : when one is better than two.
Cell Mol Life Sci. 2013 Jan 8. [Epub ahead of print]
- 5: Noguera NI, Song MS, Divona M, Catalano G, Calvo KL, García F, Ottone T, Florenzano F, Faraoni I, Battistini L, Colombo E, Amadori S, Pandolfi PP, Lo-Coco F. Nucleophosmin/B26 regulates PTEN through interaction with HAUSP in acute myeloid leukemia.
Leukemia. 2012 Nov 7. doi: 10.1038/leu.2012.314. [Epub ahead of print]
- 6: Coscia M, Vitale C, Peola S, Foglietta M, Rigoni M, Griggio V, Castella B, Angelini D, Chiaretti S, Riganti C, Guarini A, Drandi D, Ladetto M, Bosia A, Foà R, Battistini L, Boccadoro M, Fournié JJ, Massaia M. Dysfunctional V γ 9V δ 2 T cells are negative prognosticators and markers of dysregulated mevalonate pathway activity in chronic lymphocytic leukemia cells.
Blood. 2012 Oct 18;120(16):3271-9.
- 7: Sancesario GM, Cencioni MT, Esposito Z, Borsellino G, Nuccetelli M, Martorana A, Battistini L, Sorge R, Spalletta G, Ferrazzoli D, Bernardi G, Bernardini S, Sancesario G. The load of amyloid- β oligomers is decreased in the cerebrospinal fluid of Alzheimer's disease patients.
J Alzheimers Dis. 2012;31(4):865-78.
- 8: Rossi S, Furlan R, De Chiara V, Motta C, Studer V, Mori F, Musella A, Bergami A, Muzio L, Bernardi G, Battistini L, Martino G, Centonze D. Interleukin-1 β causes synaptic hyperexcitability in multiple sclerosis.
Ann Neurol. 2012 Jan;71(1):76-83. doi: 10.1002/ana.22512.
- 9: D'Alessandro A, D'Aguzzo S, Cencioni MT, Pieroni L, Diamantini A, Battistini L, Longone P, Spalloni A, De Laurenzi V, Bernardini S, Federici G, Urbani A. Protein

repertoire impact of Ubiquitin-Proteasome System impairment: insight into the protective role of beta-estradiol.

J Proteomics. 2012 Feb 2;75(4):1440-53. Epub 2011 Dec 2.

10: Canino C, Mori F, Cambria A, Diamantini A, Germoni S, Alessandrini G, Borsellino G, Galati R, Battistini L, Blandino R, Facciolo F, Citro G, Strano S, Muti P, Blandino G, Cioce M. SASP mediates chemoresistance and tumor-initiating-activity of mesothelioma cells.

Oncogene. 2011 Oct 24. doi: 10.1038/onc.2011.485. [Epub ahead of print]

11: Di Mitri D, Azevedo RI, Henson SM, Libri V, Riddell NE, Macaulay R, Kipling D, Soares MV, Battistini L, Akbar AN. Reversible senescence in human CD4+CD45RA+CD27- memory T cells.

J Immunol. 2011 Sep 1;187(5):2093-100. Epub 2011 Jul 25.

12: Libera DD, Mitri DD, Bergami A, Centonze D, Gasperini C, Grasso MG, Galgani S, Martinelli V, Comi G, Avolio C, Martino G, Borsellino G, Sallusto F, Battistini L, Furlan R. T regulatory cells are markers of disease activity in multiple sclerosis patients.

PLoS One. 2011;6(6):e21386. Epub 2011 Jun 24.

13: Placido R, Auricchio G, Gabriele I, Galli E, Brunetti E, Colizzi V, Battistini L, Mancino G. Characterization of the immune response of human cord-blood derived gamma/delta T cells to stimulation with aminobisphosphonate compounds.

Int J Immunopathol Pharmacol. 2011 Jan-Mar;24(1):101-10.

14: Annibali V, Ristori G, Angelini DF, Serafini B, Mechelli R, Cannoni S, Romano S, Paolillo A, Abderrahim H, Diamantini A, Borsellino G, Aloisi F, Battistini L, Salvetti M. CD161highCD8+T cells bear pathogenetic potential in multiple sclerosis.

Brain. 2011 Feb;134(Pt 2):542-54. Epub 2011 Jan 7.

15: Libri V, Azevedo RI, Jackson SE, Di Mitri D, Lachmann R, Fuhrmann S, Vukmanovic-Stejić M, Yong K, Battistini L, Kern F, Soares MV, Akbar AN. Cytomegalovirus infection induces the accumulation of short-lived, multifunctional CD4(+) CD45RA(+) CD27(-) T cells: the potential involvement of interleukin-7 in this process.

Immunology. 2011 Mar;132(3):326-39. doi: 10.1111/j.1365-2567.2010.03386.x.

16: Angelini DF, Zambello R, Galandrini R, Diamantini A, Placido R, Micucci F, Poccia F, Semenzato G, Borsellino G, Santoni A, Battistini L. NKG2A inhibits NKG2C effector functions of {gamma}{delta} T cells: implications in health and disease.

J Leukoc Biol. 2011 Jan;89(1):75-84.

17: D'Amelio M, Cavallucci V, Middei S, Marchetti C, Pacioni S, Ferri A, Diamantini A, De Zio D, Carrara P, Battistini L, Moreno S, Bacci A, Ammassari-Teule M, Marie H, Cecconi F. Caspase-3 triggers early synaptic dysfunction in a mouse model of Alzheimer's disease.

Nat Neurosci. 2011 Jan;14(1):69-76.

- 18: Esposito M, Ruffini F, Bergami A, Garzetti L, Borsellino G, Battistini L, Martino G, Furlan R. IL-17- and IFN- γ -secreting Foxp3⁺ T cells infiltrate the target tissue in experimental autoimmunity.
J Immunol. 2010 Dec 15;185(12):7467-73.
- 19: Mattosio D, Evangelista V, De Cristofaro R, Recchiuti A, Pandolfi A, Di Silvestre S, Manarini S, Martelli N, Rocca B, Petrucci G, Angelini DF, Battistini L, Robuffo I, Pensabene T, Pieroni L, Furnari ML, Pardo F, Quattrucci S, Lancellotti S, Davì G, Romano M. Cystic fibrosis transmembrane conductance regulator (CFTR) expression in human platelets: impact on mediators and mechanisms of the inflammatory response.
FASEB J. 2010 Oct;24(10):3970-80.
- 20: De Santis G, Ferracin M, Biondani A, Caniatti L, Rosaria Tola M, Castellazzi M, Zagatti B, Battistini L, Borsellino G, Fainardi E, Gavioli R, Negrini M, Furlan R, Granieri E. Altered miRNA expression in T regulatory cells in course of multiple sclerosis.
J Neuroimmunol. 2010 Sep 14;226(1-2):165-71.
- 21: Galli R, Starace D, Busà R, Angelini DF, Paone A, De Cesaris P, Filippini A, Sette C, Battistini L, Ziparo E, Riccioli A. TLR stimulation of prostate tumor cells induces chemokine-mediated recruitment of specific immune cell types.
J Immunol. 2010 Jun 15;184(12):6658-69.
- 22: Fiorenzo P, Mongiardi MP, Dimitri D, Cozzolino M, Ferri A, Montano N, Trevisi G, Maira G, Battistini L, Falchetti ML, Levi A, Pallini R. HIF1-positive and HIF1-negative glioblastoma cells compete in vitro but cooperate in tumor growth in vivo.
Int J Oncol. 2010 Apr;36(4):785-91.
- 23: Cencioni MT, Chiurchiù V, Catanzaro G, Borsellino G, Bernardi G, Battistini L, Maccarrone M. Anandamide suppresses proliferation and cytokine release from primary human T-lymphocytes mainly via CB2 receptors.
PLoS One. 2010 Jan 14;5(1):8688.
- 24: Vitiello L, Masci AM, Montella L, Perna F, Angelini DF, Borsellino G, Battistini L, Merola G, De Palma R, Spadaro G, Cosentini E, Palmieri G, Racioppi L. Thymoma-associated immunodeficiency: a syndrome characterized by severe alterations in NK, T and B-cells and progressive increase in naïve CD8⁺ T Cells.
Int J Immunopathol Pharmacol. 2010 Jan-Mar;23(1):307-16.
- 25: Centonze D, Mori F, Koch G, Buttari F, Codecà C, Rossi S, Cencioni MT, Bari M, Fiore S, Bernardi G, Battistini L, Maccarrone M. Lack of effect of cannabis-based treatment on clinical and laboratory measures in multiple sclerosis.
Neurol Sci. 2009 Dec;30(6):531-4.
- 26: Cencioni MT, Notturmo F, Caporale CM, Creati B, Prencipe V, Battistini L, Uncini A. T cell response in acute motor axonal neuropathy.
Int J Immunopathol Pharmacol. 2009 Oct-Dec;22(4):1043-50.

- 27: Rossi M, Piovesan P, Ghirardi O, Mastroianni D, Bombardi V, Battistini L, Cencioni MT, Capobianco D, Borsini F, Colombo M, Verdoliva A. Immunogenic, antigenic, fibrillogenic and inflammatory properties of new simplified beta-amyloid peptides. *Mol Immunol*. 2009 Aug;46(13):2524-32.
- 28: Pluchino S, Zanotti L, Brambilla E, Rovere-Querini P, Capobianco A, Alfaro-Cervello C, Salani G, Cossetti C, Borsellino G, Battistini L, Ponzoni M, Doglioni C, Garcia-Verdugo JM, Comi G, Manfredi AA, Martino G. Immune regulatory neural stem/precursor cells protect from central nervous system autoimmunity by restraining dendritic cell function. *PLoS One*. 2009 Jun 19;4(6):e5959.
- 29: Chiacchio T, Casetti R, Butera O, Vanini V, Carrara S, Girardi E, Di Mitri D, Battistini L, Martini F, Borsellino G, Goletti D. Characterization of regulatory T cells identified as CD4(+)CD25(high)CD39(+) in patients with active tuberculosis. *Clin Exp Immunol*. 2009 Jun;156(3):463-70.
- 30: Centonze D, Muzio L, Rossi S, Cavasinni F, De Chiara V, Bergami A, Musella A, D'Amelio M, Cavallucci V, Martorana A, Bergamaschi A, Cencioni MT, Diamantini A, Butti E, Comi G, Bernardi G, Ceconi F, Battistini L, Furlan R, Martino G. Inflammation triggers synaptic alteration and degeneration in experimental autoimmune encephalomyelitis. *J Neurosci*. 2009 Mar 18;29(11):3442-52.
- 31: Prigione I, Benvenuto F, Bocca P, Battistini L, Uccelli A, Pistoia V. Reciprocal interactions between human mesenchymal stem cells and gammadelta T cells or invariant natural killer T cells. *Stem Cells*. 2009 Mar;27(3):693-702.
- 32: Röttschke O, Borsellino G, Battistini L, Falk K, Kleinewietfeld M. In vivo-activated CD103+ Foxp3+ Tregs: of men and mice. *Blood*. 2009 Feb 26;113(9):2119-20.
- 33: Kleinewietfeld M, Starke M, Di Mitri D, Borsellino G, Battistini L, Röttschke O, Falk K. CD49d provides access to "untouched" human Foxp3+ Treg free of contaminating effector cells. *Blood*. 2009 Jan 22;113(4):827-36.
- 34: Centonze D, Furlan R, Gasperini C, Salvetti M, Battistini L. Early relapses after the first dose of natalizumab in active multiple sclerosis patients. *Mult Scler*. 2008 Sep;14(8):1137-8.
- 35: Campo S, Arseni B, Rossi S, D'Alessio V, Lu R, Ngoje J, Ahl PL, Bonitz S, Mannino R, Di Mitri D, Battistini L, Carminati P, De Santis R, Ruggiero V. Efficacy of a nanocochleate-encapsulated 3,5-diaryl-s-triazole derivative in a murine model of graft-versus-host disease. *Transplantation*. 2008 Jul 15;86(1):171-5.
- 36: Centonze D, Battistini L, Maccarrone M. The endocannabinoid system in peripheral lymphocytes as a mirror of neuroinflammatory diseases.

Curr Pharm Des. 2008;14(23):2370-42. Review.

37: Limana F, Zacheo A, Mocini D, Mangoni A, Borsellino G, Diamantini A, De Mori R, Battistini L, Vigna E, Santini M, Loiaconi V, Pompilio G, Germani A, Capogrossi MC. Identification of myocardial and vascular precursor cells in human and mouse epicardium.

Circ Res. 2007 Dec 7;101(12):1255-65.

38: Centonze D, Bari M, Rossi S, Prosperetti C, Furlan R, Fezza F, De Chiara V, Battistini L, Bernardi G, Bernardini S, Martino G, Maccarrone M. The endocannabinoid system is dysregulated in multiple sclerosis and in experimental autoimmune encephalomyelitis.

Brain. 2007 Oct;130(Pt 10):2543-53.

39: Borsellino G, Kleinewietfeld M, Di Mitri D, Sternjak A, Diamantini A, Giometto R, Höpner S, Centonze D, Bernardi G, Dell'Acqua ML, Rossini PM, Battistini L, Röttschke O, Falk K. Expression of ectonucleotidase CD39 by Foxp3⁺ Treg cells: hydrolysis of extracellular ATP and immune suppression.

Blood. 2007 Aug 15;110(4):1225-32.

40: Poggi A, Zancolli M, Catellani S, Borsellino G, Battistini L, Zocchi MR. Migratory pathways of gammadelta T cells and response to CXCR3 and CXCR4 ligands: adhesion molecules involved and implications for multiple sclerosis pathogenesis.

Ann N Y Acad Sci. 2007 Jun;1107:68-78.

41: Pelosi L, Giacinti C, Nardis C, Borsellino G, Rizzuto E, Nicoletti C, Wannenes F, Battistini L, Rosenthal N, Molinaro M, Musarò A. Local expression of IGF-1 accelerates muscle regeneration by rapidly modulating inflammatory cytokines and chemokines.

FASEB J. 2007 May;21(7):1393-402.