



CURRICULUM VITAE



PROF. GABRIELA CONSTANTIN MD, PhD

DEPARTMENT OF MEDICINE

UNIVERSITÀ DEGLI STUDI DI VERONA

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EDUCATION

1) **Degree in Medicine and Surgery**, marks 110/110 *cum laude*, November 6, 1991, at the University of Milan, Italy. The title of the graduation thesis was “Expression of NGF receptor in normal muscle and Duchenne dystrophy”.

2) 1991-1995, **Residency in Neurology** at School of Neurology, Policlinico Hospital, University of Milan. Mentor: Professor Guglielmo Scarlato. During this period, she performed clinical and research activities. Thesis discussion on November 8, 1995. The title of the specialization thesis was “Signal transduction mechanisms controlling lymphocyte migration into the brain”.

3) 1999-2003 **PhD in Molecular and Cellular Biology and Pathology**, University of Verona. Thesis discussion on January 30, 2004. Title of the graduation thesis: “Molecular mechanisms controlling lymphocyte recruitment in inflamed brain venules: a critical role for P-selectin glycoprotein ligand-1”

PAST AND PRESENT POSITIONS

1) 1991 - 1994, Research fellow at the Institute of General Pathology, University of Verona. The project was focused on inflammation mechanisms in brain diseases.

2) **Postdoctoral fellow at Department of Pathology, Stanford University School of Medicine, USA**, Prof. Eugene Butcher’s lab, from July 1994 - Sept. 1997. Her research studies were focused on the molecular mechanisms controlling lymphocyte migration under physiological and pathological conditions.

3) 1998 - 2006, Postdoctoral fellow, Department of Pathology University of Verona

4) 2000 - 2006, Professor of Physiopathology and Professor of General Pathology (contract appointments), University of Verona, Italy.

5) 2000 – present, Head of the laboratory of Neuroimmunology and Neuroinflammation

6) 2006 - 2014, Assistant Professor of General Pathology, tenure position, University of Verona

7) 2010 - present Professor of Systems Biology, University of Verona, Course of Bioinformatics & Biotechnology

8) 2014-2016, Associate Professor of General Pathology and Immunology, University of Verona, Italy.

9) January 2017 - present, **Full Professor of General Pathology and Immunology, University of Verona, Italy.**

10) 2016 - 2022, **Director of the PhD program in Inflammation, Immunity and Cancer at the University of Verona.**

11) 2018, Director, PhD School in Life and Health Sciences

12) 2019 - 2021, Co-deputy for Research and Development, member of the University governance team, University of Verona.

13) 2021 - 2024, **Vice-Head, Department of Medicine, University of Verona.**

14) 2025 - present, **Vice Rector for Research, University of Verona**

AWARDS AND FELLOWSHIPS

1) “De Vizart” Award, 1993, for research activity of young medical graduates, University of Milan. The research awarded was on the proinflammatory functions induced in human phagocytes by myelin proteins.

2) **Fellowship from National Multiple Sclerosis Society, New York, USA**, July 1995-June 1997 for studies regarding the mechanisms controlling lymphocyte trafficking into the brain.

3) Senior Fellowship from Federazione Italiana Sclerosi Multipla, Genova, Italy, from April 1998-March 2000 for studies regarding the mechanisms controlling lymphocyte trafficking into the brain.

4) **Award (First Prize) for Young (under 35) Multiple Sclerosis Investigators, from the European Charcot Foundation**, Lausanne, Switzerland, March 28, 2000.

5) 2003, **Rita Levi-Montalcini Award** for the contribution to Multiple Sclerosis Research by young investigators in Italy.

6) 2007, award from the Multiple Sclerosis International Federation, London, UK.

7) 2012, **Nominated by the European Research Council (ERC) as "outstanding female scientist".**

8) 2026, Matilde Vicenzi Award for Science, for studies on neurodegenerative diseases.

MEMBERSHIP OF SCIENTIFIC SOCIETIES AND BOARDS

- 2000 - present Member of the Italian Society of Neuroimmunology (AINI)
- 2001 - present Member of the Italian Society of Immunology and Allergology
- 2002 - present Member of the American Association of Immunologists (AAI), USA
- 2006 - 2009 Member of the Directive Council of the Italian Association of Neuroimmunology (AINI)
- 2006 - present Member of the H. Kunkel Society, New York, USA
- 2011 - 2016 Member of the Scientific Board of Fondazione Italiana Sclerosi Multipla (FISM) for grant evaluation
- 2018 - present Member of the Scientific Board of Fondazione Italiana Sclerosi Multipla (FISM) for grant evaluation
- 2014 - present Member of Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment (ISTAART)

COMMISSIONS OF TRUST (selection)

- 2006-2009 Member of the Directive Council of the Italian Association of Neuroimmunology (AINI)
- 2011 - 2016 Member of the Scientific Board of Fondazione Italiana Sclerosi Multipla (FISM)
- 2010 - 2022 Member of the Ethical Committee for the usage of laboratory animals at the University of Verona
- 2014 - present Member of the editorial board of Scientific Reports (Nature Group) and PeerJ journal.
- 2017- 2021 Member of the Scientific Board of the Norway Research Council (panel Neuroscience)
- 2018-2022 Member of the Executive Board of the International Society of Neuroimmunology (ISNI)
- 2018-present Member of the Scientific Board of Fondazione Italiana Sclerosi Multipla (FISM)
- 2019-present Member of the Directive Council of the Italian Association of Neuroimmunology (AINI)
- 2019 Member of the international panel for the evaluation of the excellence criteria of German Universities for the German Council of Science and Humanities
- 2019 Member of the Governance team (co-deputy for Research), University of Verona from October 2019
- 2021-2024 Department representative for Research activities and the evaluation of research quality
- 2024-2028 Chair of the Scientific Board of the Italian Multiple Sclerosis Foundation (FISM).
- 2025 - present President of the Italian Association of Neuroimmunologists (AINI)
- 2025, 2027 European Research Council, Member of the Neuroscience panel LS-5 for the evaluation of ERC advanced grants.

PATENTS

Inventor in the following patents:

1. Inhibition of Autoimmune Inflammatory Disease by a Kinase Inhibitor

1998, Stanford University, USA, Stanford Docket Number = S97-181

2. Indole and azaindole for the treatment of inflammatory and autoimmune diseases

Application No./Patent No.: 06819177.4 – 1216 PCT/EP2006067889

Filing date: 27.10.2006. PRIORITY: EP/28.10.05/EPA 05110149

3. V-ATP-ase inhibitors for use in the treatment of septic shock

Application No./Patent No.: 06819178.2 – 1216 PCT/EP2006067890

Filing date: 27.10.2006. PRIORITY: EP/28.10.05/EPA 05110163

4. Anti-leukocyte recruitment therapy for the treatment of seizures and epilepsy

Application No./Patent No.: 07809438.0 – 1222 PCT/US2007013624

Filing date: 06.06.2007. PRIORITY: US/07.06.06/ USP 811873G.

5. Modulation of leukocyte activity in treatment of neuroinflammatory degenerative diseases. Application No./Patent USA: 61886562. Filing date: 03.10.2013

6. Blockade of Tim-1 Pathways and P-Selectin Pathways in Treatment of Neuroinflammatory Degenerative Disease. U.S. Application Serial No. 62/334,986. Filing date: 21.06.2016

7. Ritonavir for use in treating a neurodegenerative and/or neuroinflammatory disorders

Italian Application Serial No. 102025000023263. Filing date: 10.09.2025

8. Cathepsin E-directed inhibitors and uses thereof

Italian Application Serial No. 102025000023248. Filing date: 10.09.2025

COMPANY ACTIVITIES

In 2010 Dr. Constantin was awarded with 988.000 Euro from the Italian Ministry of Education, University and Research (MIUR) for a project aimed to create a university spinoff (Veneto Pharma). Project title: Alpha4beta1 integrin antagonists for the treatment of epilepsy and autoimmune diseases.

In 2014 Dr. Constantin was board member and co-founded Leuvas Therapeutics (Mountain View CA, USA), a company focused on new therapeutic approaches for brain inflammatory diseases based on modulation of leukocyte trafficking.

Dr. Constantin collaborated or is presently collaborating with several companies including: GlycoMimetics Inc, Gaithersburg, MD USA, Micromet AG, Munich, Germany, Astrazeneca R&D, Mölndal, Sweden, ONO Pharmaceutical Japan, Nikem Research Milan, Italy, Biogen Idec USA, Amgen, Thousand Oaks, CA, USA, Vifor/OM Pharma Pharma, Switzerland, CLS Therapeutics, UK, Carthera Lyon, France.

CONGRESS ORGANIZATION AND INVITED PRESENTATIONS

Organization of meetings:

1. Organizer, International meeting “New insights into immunosuppression and treatment of autoimmune diseases”, Verona, November 3, 2006; sponsor Miltenyi Biotec.
2. Organizer, 17th meeting of the Italian Neuroimmunology Association (AINI), Verona Sept. 30-Oct 3, 2007.
3. Organizer, the 29th meeting of the Italian Neuroimmunology Association (AINI), Verona Sept. 16-19, 2021.
4. Organizer, the 31st meeting of the Italian Neuroimmunology Association (AINI), Palermo, May 3-6, 2023.
5. Organizer, the 33st meeting of the Italian Neuroimmunology Association (AINI), Turin, May 6-8, 2025.
6. Member of the organizing committee, International Congress of Neuroimmunology, Venice, October 2027.

Invited presentations (selection):

1. Invited speaker, Royal Society of Medicine (London UK), “Signal transduction pathways in chronic inflammation” meeting, December 2000.
2. Invited lecturer, "Spatial And Temporal Dynamics Of Immune Responses" course, International PhD School, San Raffaele Hospital, Milan. Title presentation: “Tracing leukocyte recruitment in vivo”, June 2005.
3. Invited speaker at the international meeting on “Chemokines and Chemokine receptors in the nervous system” Rome, October 27, 2007.
4. “Keystone Leukocyte trafficking” meeting, Keystone, Colorado, Jan. 13-18, 2008: i) invited speaker, title of the presentation: “Anti-leukocyte recruitment treatment for the prevention and therapy of epilepsy”; ii) chairman and keynote speaker for the session “Preclinical and Clinical Anti-Adhesion and Anti-Chemokine Therapy”.
5. Invited speaker, Annual H. Kunkel Society meeting Rockefeller University, April 22-25, 2009.
6. Key note speaker, “Endo-Neuro-Psycho” meeting, Doorwerth, The Netherlands, June 3-5, 2009.
7. Invited speaker at the 10th International Congress of Neuroimmunology, Barcelona, October 26-30, 2010. Presentation title: A role for leukocyte trafficking mechanisms in the pathogenesis of epilepsy.
8. Invited speaker at the 8th IBRO world congress of Neuroscience, Florence, July 14-18, 2011. Presentation title: "A role for mucins in leukocyte trafficking in neurological diseases".

9. Invited Speaker at the Chemokines and Leukocyte Trafficking in Homeostasis and Inflammation meeting, Keystone Symposia, Breckenridge January 8-13 2012. Presentation title: "New Insights into leukocyte trafficking in CNS diseases".
10. Invited speaker and chairman of the session "Preclinical Therapeutics II: Novel Approaches" at the Alzheimer's Association International Conference (AAIC), Copenhagen, Denmark, July 12-17, 2014. Title presentation: "Neutrophils induce Alzheimer's-like disease via LFA-1-integrin and NETs".
11. Invited speaker at the International congress on Neuroimmunology and Therapeutics, July 20-22, 2015 San Francisco, USA. Title presentation: "Neutrophils induce Alzheimer's disease-like pathology and cognitive decline via a mechanism dependent on LFA-1 integrin".
12. Invited speaker, November 28, 2012, seminar at the Institute of Pharmaceutical Sciences, Department of Chemistry and Applied Biosciences, ETH Zurich, Switzerland. Presentation title: "New insights into leukocyte trafficking in the central nervous system diseases".
13. Invited speaker, Congress "Gut feeling & Gut Thoughts: The effect of gut bacteria on the brain, Alzheimer's and brain amyloidosis", Geneva, Switzerland, November 3rd, 2015. Presentation title: "A role for neutrophils in Alzheimer's disease".
14. Invited speaker, March 13, 2015, seminar at the University of Milan, Science Department of Pharmacological and Biomolecular Sciences. Presentation title: "Neutrophils induce Alzheimer's disease-like pathology and cognitive decline via a mechanism dependent on LFA-1 integrin".
15. Invited speaker, March 21, 2016, seminar, Kennedy Institute of Rheumatology, University of Oxford. Presentation title: "A role for neutrophils in Alzheimer's disease".
16. Invited speaker, March 23, 2016, seminar at the University of Cambridge, Department of Clinical Neurosciences and John van Geest Centre for Brain Repair. Presentation title: "Neutrophils: key players in the pathogenesis of Alzheimer's disease".
17. Invited speaker Plenary Session, July 22 – 28, 2016, Alzheimer's Association International Conference (AAIC) 2016, Toronto, Canada. AAIC. Presentation title: "Role of peripheral inflammation in cognitive impairment and Alzheimer's disease".
18. Invited speaker, March 14, 2017 seminar at the University of Bonn, Immune Sensation Cluster, Germany, Presentation title: "A role for leukocyte trafficking in Alzheimer's disease".
19. Invited speaker, May 22, 2017 seminar at the Queen Mary's School of Medicine and Dentistry, London, UK. Presentation title: "A role for leukocyte trafficking in Alzheimer's disease".
21. Invited speaker, October 26, 2017 seminar at the University of Zurich, Switzerland. Presentation title: "Molecular mechanisms of leukocyte trafficking in Alzheimer's disease".
22. Invited speaker, Presentation title: "A role for leukocyte trafficking in Alzheimer's disease", Congress of the Italian Society of Immunology, Clinical Immunology and Allergology (SIICA), Bari, May 28-31, 2017.
23. Invited speaker, Presentation title: "Linking the basis of neurodegenerative diseases: from para-inflammation to autoimmunity", XXVII AINI Congress, Trieste, May 7-10, 2018.
24. Invited speaker, March 14, 2017 seminar at the University of Bonn, Immune Sensation Cluster, Germany, Presentation title: "A role for leukocyte trafficking in Alzheimer's disease".
25. Invited speaker, presentation title: "A role for neutrophils in Alzheimer's disease", IV Venusberg meeting, Bonn, Germany, May 9-11, 2019.
26. Invited speaker, "Immune cell crosstalk in the pathogenesis of Alzheimer's disease", *The NO-Age and NO-AD seminar series*, Oslo University, November 15, 2021.
27. Rita Levi-Montalcini lecture, Italian Multiple Sclerosis Society Meeting, Rome, May 29-

June 1, 2023.

28. Invited speaker, Seminar entitled “Immune cell interactions at brain barriers during neurodegenerative diseases” - *Periphery-CNS miscommunication in neurodegenerative disorders: focus on brain barriers pathology seminar series* - FENS webinar November 24, 2023.

29. Invited speaker, Role of neuro-immune communication in the development of neurotoxic inflammation, XV SIICA National Congress, Perugia, 17-20 May 2025.

30. Invited speaker, Seminar entitled “Alterations of the neuro-immune communication in the development of neurodegenerative diseases” Luxembourg Centre for Systems Biomedicine, February 5, 2025.

31. Invited speaker, Neutrophil-mediated neurotoxic inflammation in neurodegenerative diseases, Giovanni Armenise Harvard Foundation, “20th Symposium Enhancing Scientific Research through Technological Breakthroughs,” June 21–24, 2026, Villa Cavalletti and Villa Grazioli, Grottaferrata, Italia.

FUNDING ID (selection)

Dr. Constantin's projects were financed or are currently funded by national and international agencies including the **European Research Council (ERC)**, **National Multiple Sclerosis Society (NMSS) NY, USA**, **Alzheimer's Drug Discovery Foundation (ADDF) USA**, **Fondazione Italiana Sclerosi Multipla (FISM)**, **Genoa, Italy**, **Cariverona Foundation, Verona, Italy**, and the **Italian Ministry of Education and Research (MIUR)**, **Marie Curie doctoral networks**, **Horizon Europe**.

European Research Council (ERC) GRANTS e Horizon Europe projects:

1. **European Research Council (ERC) Starting grant, Acronym NEUROTRAFFICKING, grant agreement nr. 261079, LS6 sector to study the mechanisms controlling leukocyte migration into the inflamed central nervous system in experimental models of multiple sclerosis and epilepsy; Project title: “Molecular mechanisms controlling leukocyte trafficking in the central nervous system”.**

2. **ERC Proof of Concept project, period 2016-2017, acronym IMPEDE grant agreement nr. 69256. Project title: Immunomodulatory effects of sustained PTTH release in inflammatory diseases.**

3 **ERC advanced grant for the period 2016-2021 (grant agreement nr. 695714), acronym IMMUNOALZHEIMER. Project title: The role of immune cells in Alzheimer's disease. Euro: 2.500.000.**

4. **ERC Proof of Concept grant for the period June 2022-May 2024, entitled “Targeting neutrophil-dependent neurotoxicity for the treatment of Alzheimer's disease”, Acronym NeutrAD (GA 101069397).**

5. 2023 – 2027, PI and beneficiary in Horizon Europe Marie Curie doctoral networks – project #101072895 “Targeting Circadian Clock Dysfunction in Alzheimer’s Disease” (Acronym TClock4AD).

Recent funding National Recovery Plan, #NEXTGENERATIONEU:

- Piano Nazionale di Ripresa e Resilienza (PNRR), #NEXTGENERATIONEU (NGEU), project MNESYS (PE0000006) – A Multiscale integrated approach to the study of the nervous system in health and disease (DN. 1553 11.10.2022). Prof. Constantin is National Coordinator of Spoke 7 “Neuroimmunology and neuroinflammation” and coordinator of research activities from the University of Verona.

Euro: 1.658.394 (PI Prof. Constantin); Euro 4.273.600 (finanziamento UNIVR; Coordinator: Prof. Constantin).

- PNRR project - #NextGenerationEU – in the context of the National Biodiversity Future Center (NBFC), Centro Nazionale 5. (M4C2I1) (DM n. 3138 del 16/12/2021). Euro: 400.000 Euro (PI Prof. Constantin).

RESEARCH ACTIVITY (brief summary)

Starting as an undergraduate student and then as a graduated medical doctor, Dr. Constantin carried out studies on the effect of myelin components on the proinflammatory functions exerted by human phagocytes at the University of Verona and University of Milan, Italy.

Following her research career and her interests in the pathogenesis of inflammatory diseases, Dr. Constantin spent a period in Prof. Eugene Butcher's lab at Dept. of Pathology, Stanford University School of Medicine. During this postdoc period her research was focused on the mechanisms involved in leukocyte trafficking under physiological and pathological conditions.

Dr. Constantin set up an intravital microscopy laboratory to study leukocyte, cancer and stem cell interaction with brain endothelium in brain, spinal cord, dermal, muscle and lymphoid microvessels with epifluorescence microscopy or two-photon laser scanning microscopy. Particularly, her group identified key molecular mechanisms controlling the recruitment of leukocyte subpopulations in brain postcapillary venules in CNS diseases (*J. Immunol.*, 2002; *Blood*, 2003; *J. Immunol.* 2005; *Nat. Med.* 2008; *Immunity* 2014). Dr. Constantin is also involved in studies aimed to identify the signal transduction pathways and the modalities of integrin activation controlling lymphocyte homing and recruitment during physiological conditions and during brain inflammation (*Immunity*, 2000; *Immunity* 2004; *Nat. Immunol.* 2009). She also collaborated for projects studying the mechanisms of stem cell migration into the dystrophic muscle and in the inflamed brain in mice with experimental autoimmune encephalomyelitis (*J. Cell Biol.* 2001; 2003; *Nature* 2005; *Blood* 2006; *J. Cell Biol.* 2006; *Tissue Eng* 2009).

Dr. Constantin's main current interest is focused on the fundamental aspects of innate and adaptive immune cell function, with an emphasis on the trafficking of leukocytes and neuro-immune interactions during autoimmune and inflammatory diseases of the central nervous

system (CNS). Her group employs molecular and genetic approaches, single-cell analysis and advanced imaging combined with several other experimental methodologies to study the migration, cell-cell interactions and function of immune cells in animal models of disease and in cells from patients with neuroinflammatory diseases (*Nat. Med.* 2008; *BMC Neurology* 2010; *J Leuk Biol.*, 2011; *Nat Immunol.*, 2011; *Immunity* 2014; *Nat. Med.* 2015; *J. Neuroinflamm.* 2024; *Nat. Commun.* 2025).

Dr. Constantin is presently collaborating with mathematicians, physicians, and informaticians in order to analyze brain tissue networks and the mechanisms of leukocyte activation and migration under inflammatory conditions using systems biology approaches.

As a neuroimmunologist, Dr. Constantin is aiming to identify new therapeutic targets and approaches for CNS diseases in which inflammation mechanisms have a detrimental role.

PRESENT MAIN RESEARCH AREAS

1. The communication between immune cells and brain cells during neurodegenerative and inflammatory diseases (Multiple Sclerosis and Alzheimer's Disease)
2. Understanding the molecular mechanisms of neurotoxic inflammation in neurodegenerative diseases using omics approaches
3. Analysis and modeling of immune cell trafficking and vascular inflammation during autoimmune and chronic inflammatory diseases
4. Role of meningeal immunity in brain inflammatory diseases
5. Study of neuropathological elements using network-based approaches in central nervous system diseases

PUBLICATIONS

- 1) Baron P., **G. Constantin**, A. D'Andrea, D. Ponzin, E. Scarpini, G. Scarlato, G. Trinchieri, F. Rossi and M. Cassatella.
Production of tumor necrosis factor and other proinflammatory cytokines in human mononuclear phagocytes stimulated with myelin P2 protein.
Proc. Natl. Acad. Sci. USA, 90:4414-4418, 1993.
- 2) Cassatella M.A., M. Aste, F. Calzetti, **G. Constantin**, M. Ceska and F. Rossi. Studies on the regulatory mechanisms of Interleukin-8 gene expression in resting and IFN-gamma-treated neutrophils: evidence on the capability of staurosporine of inducing the production of Interleukin-8 by human neutrophils
Biochem. Biophys. Res. Commun. 190:660-667, 1993.
- 3) Cassatella M.A., L. Meda, S. Bonora, M. Ceska, and **Constantin G.**
Interleukin 10 inhibits the release of proinflammatory cytokines from human polymorphonuclear leukocytes. Evidence for an autocrine role of TNF and IL-10 in mediating the production of IL-8 triggered by lipopolysaccharide.
J. Exp. Med. 178:170-175, 1993.
- 4) Laudanna C., **Constantin G.**, P. Baron, E. Scarpini, G. Scarlato, G. Cabrini, M.A. Cassatella F. Rossi and G. Berton.
Sulfatides trigger increase of cytosolic free calcium, and enhanced expression of tumor necrosis factor- α , and interleukin-8 mRNAs in human neutrophils. Evidence for a role of L-selectin as a signaling molecule.
J. Biol Chem. 269:4021-4026, 1994.
- 5) **Constantin G.**, C. Laudanna, P. Baron, and G. Berton.
Sulfatides trigger cytokine genes expression and protein secretion in human monocytes
FEBS letters 350:66-70, 1994.
- 6) Baron P, **Constantin G.**, L. Meda, E. Scarpini, G. Scarlato, G. Trinchieri, G. Monasta, F. Rossi, M.A. Cassatella.
Cultured human monocytes release proinflammatory cytokines in response to myelin basic protein
Neurosci. Letters, 252:151, 1998.
- 7) **Constantin G.**, C. Laudanna and E. Butcher.
Novel method for following lymphocyte traffic in mice using [3H]-glycerol labelling
J. Immunol. Meth., 203:35, 1997.
- 8) **Constantin G.**, S. Brocke, A. Izikson, C. Laudanna, E. Butcher.
Tyrphostin AG490, a tyrosine kinase inhibitor, blocks actively-induced experimental allergic encephalomyelitis.
Eur. J. Immunol., 28:3523-3529, 1998.
- 9) **Constantin G.**, C. Laudanna, S. Brocke, E. Butcher.
Inhibition of experimental autoimmune encephalomyelitis by a tyrosine kinase inhibitor.
J. Immunol., 162:1144-1149, 1999.
- 10) C. Laudanna, D. Mochly-Rosen, T. Lion, **G. Constantin**, E. Butcher.

Evidence of zeta protein kinase C involvement in polymorphonuclear neutrophil in integrin-dependent adhesion and chemotaxis.

J. Biol. Chem., 273:30306-30315, 1998.

11) **Constantin G.**, L Piccio, Bussini S, Pizzuti A., E. Scarpini, P. Baron, G. Conti, S. Pizzul, G. Scarlato.

Induction of adhesion molecules on human Schwann cells, an immunofluorescence study.

J. Neurol. Sci., 170:124-130, 1999.

12) **Constantin G.**, M. Majeed, C. Giagulli, L. Piccio, J. Y. Kim, and C. Laudanna.

Chemokines trigger immediate beta2 Integrin affinity and mobility Changes: differential regulation and roles in lymphocyte arrest under flow

Immunity, 16:759-769, 2000.

13) Y. Torrente, J.P. Tremblay, F. Pisati, M. Belicchi, B. Rossi, M. Sironi, **G. Constantin**, M. El Fhaime, M.G. D'Angelo, N. Caron, D. Paulin, G. Scarlato and N. Bresolin.

Intraarterial injection of muscle-derived CD34+ SCA-1+ stem cells restore dystrophin in *mdx* mouse.

J. Cell Biology, 152(2):335-48, 2001.

14) Molecular mechanisms involved in lymphocyte recruitment in brain microcirculation: critical roles for PSGL-1 and trimeric Galphai linked receptors

Piccio L., Rossi B., Scarpini E., Giagulli C, Laudanna C., Issekutz A., Vestweber D., Butcher E., **Constantin G.**

J. Immunol., 168(4):1940-1949, 2002.

15) Laudanna C., Kim Y., **Constantin G.**, Butcher E.

Rapid integrin activation by chemokines.

Immunol. Rev. 186: 37-46, 2002.

16) Laudanna C. and **Constantin G.**

New models of intravital microscopy for analysis of chemokine receptor-mediated leukocyte vascular recognition.

J. Immunol. Methods, 273(1-2):115-123, 2003.

17) Battistini L., Piccio L., Rossi B., Bach S., Galgani S., Gasperini C., Ottoboni L., Ciabini D., Caramia D., Bernardi G., Laudanna C., Scarpini E., Borsellino G. and **Constantin G.**

CD8+ lymphocytes from acute multiple sclerosis patients display selective increase of adhesiveness in brain venules: a critical role for P-selectin-glycoprotein ligand-1.

Blood, 101(12):4775-82, 2003.

18) Torrente Y., G. Camirand, F. Pisati, M. Belicchi, B. Rossi, F. Colombo, M. El Fahime, N. J. Caron, **G. Constantin**, J. P. Tremblay , N. Bresolin

Identification of a putative pathway for the muscle homing of the stem cells in a muscular dystrophy model

J. Cell. Biol., 162(3): 511-20, 2003.

19) Giagulli C., Scarpini E., Ottoboni L., **Constantin G.**, Laudanna C

Rho A and $\square$ PKC control distinct modalities of LFA-1 activation by chemokines: critical role of LFA-1 affinity triggering in lymphocyte in vivo homing.

Immunity 20: 1-20, 2004.

20) Di Gennaro A, Carnini C, Buccellati C, Ballerio R, Zarini S., Fumagalli F, Viappiani S, Librizzi L., Hernandez A., Murphy R.C., **Constantin G.**, de Curtis M., Folco G., and Sala A.

Cysteinyl-leukotrienes receptor activation in brain inflammatory reactions and cerebral edema formation: a role for transcellular biosynthesis of cysteinyl-leukotrienes.
FASEB J., 18(7):842-4., 2004.

21) D'Ambrosio D., Lecca P., **Constantin G.**, Priami C., and Laudanna C. Concurrency in leukocyte recruitment: the way to a predictive computer modelling.
Trends in Immunol., Aug;25(8):411-6, 2004.

22) Colantonio L., Rossi B., **Constantin G.**, D'Ambrosio D. Integration and independent acquisition of specialized skin- versus gut-homing and Th1 versus Th2 cytokine synthesis phenotypes in human CD4⁺ T cells.
Eur. J. Immunol, 2004 Sep;34(9):2419-29.

23) **Constantin G.**
P-Selectin Glycoprotein ligand-1 as a new therapeutic target.
Drug News Perspect., 17(9):579-586, 2004.

24) Lecca P, Priami C, Laudanna C, **Constantin G.**
A BioSpi model of lymphocyte-endothelial interactions in inflamed brain venules.
Pac Symp Biocomput, 521-532, 2004.
PubMed ID PMID: 14992530
<http://www-smi.stanford.edu/projects/helix/psb04/>
www-smi.stanford.edu/projects/helix/psb04/lecca.pdf

25) Lecca P., Priami C., Laudanna C., **Constantin G.**
Predicting cell adhesion probability via the biochemical stochastic p-calculus.
Proceedings of the 19th Annual ACM Symposium on Applied Computing, March 2004, 211-212.
<http://portal.acm.org/citation.cfm?doid=967900.967944>
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26) Lecca P., Priami C., Quaglia P., Rossi B., Laudanna C., **Constantin G.** (2004)
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Simulation, 80(6), 273-288 (2004). ISSN: 0037-5497

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Efficient recruitment of lymphocytes in inflamed brain venules requires expression of Cutaneous lymphocyte antigen (CLA) and fucosyltransferase-VII.
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28) Pluchino S, Zanotti L, Rossi B, Brambilla E, Ottoboni L, Salani G, Martinello M, Cattalini A, Bergami A, Furlan R, Comi G, **Constantin G** and Martino G.
Neurosphere-derived multipotent precursors promote long-lasting neuroprotection by an immunomodulatory mechanism
Nature, 2005 Jul 14;436(7048):266-71.

29) Giagulli C, Ottoboni L, Cavegion E, Lowell C, Rossi B, **Constantin G**, Laudanna C, Berton G
The Src family kinases Hck and Fgr are dispensable for inside-out, chemoattractant-induced signaling regulating beta2 integrin affinity and valency in neutrophils, but are required for beta2 integrin-mediated outside-in signaling involved in sustained adhesion.
J. Immunol. 2006; 2006 Jul 1;177(1):604-11.

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Complete repair of dystrophic skeletal muscle by mesoangioblasts with enhanced migration ability.

J Cell Biol. 2006 Jul 17;174(2):231-43.

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BOOK CHAPTERS

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