

Francesca Granucci, PhD

### **Education**

01-10-1996: PhD in Pharmacology and Toxicology, University of Milan. Field of study, immunology.

22-02-1990: MS in Biological Sciences (summa cum laude), University of Pisa. Field of study, molecular biology.

### **Current position**

2006-Present: Associate Professor, Department of Biotechnology and Biosciences, University of Milano-Bicocca, Milan, Italy.

November 2014-present: PI of the Unit of Cell Signalling and Innate Immunity, Humanitas Clinical and Research Center, Rozzano, Milan, Italy.

### **Previous positions**

2001-2006: Researcher at the University of Milano-Bicocca (Milan). Member of the Dept. of Biotechnology and Biosciences.

1997-2001: Post Doct at the National Research Council (CNR), Milan, Italy. Supervisor, Prof. P. Ricciardi-Castagnoli.

1996-1997: Research Fellow at the Dana Farber Cancer Institute, Harvard University, Boston, USA. Supervisor, Prof H. Cantor.

### **Fellowships and awards**

2012: Ita Askonas prize from EFIS-EJI for best female group leader in immunology.

2003: CIRE (Centro di Iniziative Regionale ed Europea) award, for important activities carried out in European projects.

1997: Research fellowship Ares Serono Foundation (declined)

1997: Harlan Nossal award for the best work on Experimental Immunology presented at the Italian Society of Immunology in 1997.

1996-1997: Research fellowship of the Telethon Research Foundation for Muscular Dystrophy and Genetic Disorders.

1996: Research fellowship CNR, Biotechnology and Molecular Biology (declined)

1995: FABT (Fondazione Adriano Buzzati-Traverso) award.

1990: Research fellowship CNR, Methodologies for the study of eucariotic genes expression (declined)

1990: Research fellowship Italian Consortium of Technology and Immunomodulation

### **Teaching activities**

1998- at present: Basic and Advanced Immunology courses at the University of Milano-Bicocca for the first level degrees in Biotechnology and Biological Sciences, on average 140 hours per year.

Since 2001 at least three lectures per years to (inter)national courses or (inter)national institutes.

### ***Supervision of graduate students and post-doctoral fellows***

**2001-today:** 16 Ph.D students supervised, Ph.D. program in Translational Medicine, University of Milano-Bicocca, Department of Biotechnology and Biosciences and Department of Medicine, Milan, Italy.

**2001-today:** 8 Post Doc supervised, University of Milano-Bicocca, Department of Biotechnology and Biosciences, Milan, Italy.

### ***Major contribution in the early carriers of excellent researchers***

As director of the Immunology program in the courses of Biology and Biotechnology, Erasmus Plus coordinator at the University of Milano-Bicocca and Faculty of the DIMET PhD program I encourage and motivate many undergraduate and graduate students in biomedical sciences. I have

supervised and educated at least 16 PhD students and 8 post-doctoral fellows that have now positions in academia or biopharma. As an illustrative example, Ivan Zanoni, a former post doct in my laboratory, is appointed as researcher at the University of Milano-Bicocca and has a position as Associate Professor at the Harvard Medical School in Boston. Giorgio Raimondi, former PhD student, is Assistant Professor at the Johns Hopkins University (Baltimore), Norman Pavelka, former undergraduate and PhD student, is appointed as Principal Investigator at Singapore Immunology Network, Renato Ostuni, former PhD student is now PI at TIGET and others. In my research group I am currently supervising 4 PhD students, 3 junior and 2 senior post doct, and three undergraduate students.

### ***Institutional responsibilities***

**2001-today:** Faculty member of the University of Milano-Bicocca, Milan, Italy

**2003-today:** Faculty of the International PhD School in Translational and Molecular Medicine (DIMET) of the University of Milano-Bicocca ([www.DIMET.org](http://www.DIMET.org))

**2010-2012:** Member of the Department Internal Board, Dep. of Biotechnology and Bioscience, University of Milano-Bicocca, Milan, Italy.

**2014-today:** Erasmus Plus program coordinator for the Dep. of Biotechnology and Bioscience, University of Milano-Bicocca, Milan, Italy

**2014-today:** Coordinator of the internationalization activities of the Dep. Of Biotechnology and Biosciences

2014-today: Member of the University of Milano-Bicocca committee for animal welfare

### **Commissions of trust**

2014-today Member of the board of directors of SIICA (Società Italiana di Immunologia Clinica e Allergologia)

Editor in Chief of the section Molecular Innate Immunity of *Frontiers in Immunology*

Member of the Editorial Advisory Board of the *Open Autoimmunity Journal*

Member of the Editorial Board of the *American Journal of Clinical and Experimental Immunology*

Member of the Editorial Board *AIMS Molecular Science*

Ad hoc reviewer for different international journal including *Science*, *PNAS*, *Nature Communications*, *European Journal of Immunology*, *Journal of Immunology*, *Cancer Research*, *PlosOne*, *PlosBiology*, *Mediators of Inflammation*, *International Immunology*, *Immunology Letters* and others.

Ad hoc reviewer for several grant agencies including: Italian Ministry of University and Research, Portuguese Foundation for Science and Technology, The Wellcome Trust, Health Research Board (Irlanda), European Research Council (external reviewer), NIH, Ontario Research Fund-GL2, and others.

### **Membership of scientific societies**

2002-today Member of SIICA (Società Italiana di Immunologia Clinica e Allergologia).

2012-today Member of EMDS (European Macrophage and Dendritic cell Society).

2012-today Member of ESCI (European Society of Clinical Investigation).

2013-2014 Member of SLB (Society of Leukocyte Biology).

2014-today Member of IEIIS (International Endotoxin and Innate Immunity Society).

### **Organization of scientific meetings**

**2013** Scientific program coordinator in collaboration with Francesco Peri and Jerrold Weiss of ICI2013 Satellite Meeting: “Endotoxin, TLR4 and beyond”, August 21<sup>st</sup>, Villa Forno, Cinisello Balsamo (Milano)

**2103** Scientific program coordinator in collaboration with Massimiliano Pagani of DIMET course on Molecular Immunology, November 13-15 Istituto Nazionale Genetica Molecolare, Milano.

**2012** Scientific program coordinator in collaboration with G. Chirico and M. Collini XVI SCHOOL OF PURE AND APPLIED BIOPHYSICS Multimodal Methods for Cell Imaging and Tracking; VENICE, January 30 - February 3, 2012

**Example of leadership in industrial innovation or design**

Co-funder of inTHEna, spin off of the Universities of Milano and Milano-Bicocca. inTHEna has been founded with the purpose to valorize nanostructured drugs produced thanks to collaborative research projects with the group of Davide Prospero.

**Invitations to international meetings (five years, selected):**

2010 "Toll like Receptors" Workshop, Innate Immunity of the Eye" in Ettal, South Germany 8-9 April 2010

2011 "TLRs". EFIS/EJI Course on Basic and Translational Immunology: "The Innate Immunity" Riccione, Italy 27-28 September 2011

2011 "The multifaceted roles of CD14" 2011 Joint annual meeting SIICA –DGFI Riccione, September 28th – October 1st

2012 "The multifaceted roles of CD14" ESCI European Phagocyte Workshop Budapest, Hungary March 22-24, 2012

2012 "The multifaceted roles of CD14" EMDS, Debrecen, Hungary, September 1-3, 2012.

2012 "The multifaceted roles of CD14 in LPS-mediated inflammatory conditions" ECI 2012 Glasgow September 5-8.

2012 "The multifaceted roles of CD14 in LPS-mediated inflammatory conditions" IEIIS2012, Tokyo October 23-26.

2012 "TLRs and innate immunity" Scuola Ruggero Ceppellini, Innate Immunity 2012, from evolution to revolution, Sorrento November 1-3.

2012 "The multifaceted roles of CD14 in LPS-mediated inflammatory conditions" 2nd Conference of translational medicine on pathogenesis and therapy of immune-mediated diseases SIICA, Rozzano (Italy) November 5-7.

2012 "The multifaceted roles of CD14 in LPS-mediated inflammatory conditions" Targeting dendritic cells for immunity and tolerance, Joint meeting of Italian (SIICA) and Swiss (SSAI) societies of Immunology Ravello, Italy November 8-9.

2013 "Mechanisms and consequences of NFAT signaling pathway activation downstream of PRRs in innate immune cells" ICI2013 Milan, Italy

2013 "Innate immunity and TLRs" EFIS Basic Immunology: Fundamental Concepts and Relevance to Human Disease and Therapeutics Genoa, Italy May 6-7

2014 "Role of CD14-NFAT signalling pathway in innate immunity" IX National Conference of SIICA, Firenze May 28-31

2014 "Mechanisms and consequences of NFAT signaling pathway activation in innate immune cells in LPS-induced inflammatory conditions" 11<sup>th</sup> Aegean Conference of Innate Immunity, Olympia, Greece June 1-6, 2

2014 "Mechanisms and consequences of NFAT signaling pathway activation in innate immune cells" XXXIX Congress of the Brazilian Society for Immunology, Rio de Janeiro, October 18-22.

2015 "Immune system, Pathogens and cell damage recognition" Course on Immunodeficiencies in Pediatrics Ruggero Ceppellini Immunology School, February 6th, Naples, Italy

2015 Chairman of a symposium and a workshop at ECI2015, September 6-9, Vienna

2016 Chairman of a symposium at ICI2015, August 21-26 Melebourne, Australia

2016 Invited speaker at 41<sup>st</sup> FEBS Congress, 3-8 September Izmir, Turkey

## Granted Patents

Nanoconstructs with pharmacological activities PCT/IB2013/055943, WO2014013473 A1 inventors: Francesca Granucci, Davide Prosperi, Miriam Colombo, Ivan Zanoni, Fabio Corsi

Lipid antagonists with anti-septic shock, anti-inflammatory, anti-ischemia and analgesic activity EP1996603 A1 PCT/EP2007/002279 inventors: Francesco Peri, Francesco Maria Nicotra, Barbara Simona Costa, Francesca Granucci

## Publications

*Numerical analysis*

Publications: 102;

Citations: google scholar, over 8750; scopus, over 6400

H index: google scholar 42, scopus 38.

1. Mingozzi F, Spreafico R, Gorletta T, Soncini MC, Cigni C, Di Gioia M, Caccia M, Sironi L, Collini M, Rusconi M, Chirico G, Zanoni I and **Granucci F** Lymph node-resident NK cells become anti-tumor effectors upon prolonged contact with dendritic cells (submitted to EMBO Mol Med)
2. Sgambelluri F, Diani M, Frigerio E, Drago L, **Granucci F**, Banfi G, Altomare G, Reali E. A role for CCR5+CD4 T cells in cutaneous psoriasis and for CD103+ CCR4+ CD8 Teff cells in the associated systemic inflammation. (Submitted to J. of Autoimmunity).
3. Broggi A, Cigni C, Zanoni I, **Granucci F**. Preparation of single cell suspensions for cytofluorimetric analysis from different mouse skin regions. JoVE in press
4. Santini B, Zanoni I, Marzi R, Cigni C, Bedoni M, Gramatica F, Palugan L, Corsi F, **Granucci F**, Colombo M. Cream formulation impact on topical administration of engineered colloidal nanoparticles. PLoS One. 2015 May 11;10(5):e0126366. doi: 10.1371/journal.pone.0126366. eCollection 2015.
5. Peri F, **Granucci F**, Weiss J. "Endotoxin, TLR4 signaling and beyond". Mol Immunol. 2015 Feb;63(2):125-6. doi: 10.1016/j.molimm.2014.09.001. Epub 2014 Sep 11.
6. Broggi A, **Granucci F**. Microbe- and danger-induced inflammation. Mol Immunol. 2015 Feb;63(2):127-33. doi: 10.1016/j.molimm.2014.06.037
7. Guglielmetti S, Zanoni I, Balzaretto S, Miriani M, Taverniti V, De Noni I, Presti I, Stuknyte M, Scarafoni A, Arioli S, Iametti S, Bonomi F, Mora D, Karp M, **Granucci F**. The murein lytic enzyme TgaA of Bifidobacterium bifidum MIMBb75 modulates dendritic cell maturation through its CHAP amidase domain. Appl Environ Microbiol. 2014 Sep;80(17):5170-7. doi: 10.1128/AEM.00761-14
8. Petrarca C, Clemente E, Toto V, Iezzi M, Rossi C, Zanotta S, Mistrello G, Zanoni I, **Granucci F**, Arioli S, Mora D, Guglielmetti S, Paganelli R, Di Gioacchino M. rBet v 1 immunotherapy of sensitized mice with Streptococcus thermophilus as vehicle and adjuvant. Hum Vaccin Immunother. 2014 Mar 6;10(5).
9. **Granucci F**, Lutz MB, Zanoni I The nature of activatory and tolerogenic dendritic cell-derived signal 2. Front Immunol. 2014 Feb 6;5:42. doi: 10.3389/fimmu.2014.00042. eCollection 2014.

10. Cighetti R, Ciaramelli C, Sestito SE, Zanoni I, Kubik L, Ardá-Freire A, Calabrese V, **Granucci F**, Jerala R, Martín-Santamaría S, Jiménez-Barbero J, Peri F. Modulation of CD14 and TLR4·MD-2 Activities by a Synthetic Lipid A Mimetic. *Chembiochem*. 2014 Jan 24;15(2):250-8. doi: 10.1002/cbic.201300588. Epub 2013 Dec 12.
11. Catucci M, Zanoni I, Draghici E, Bosticardo M, Castiello MC, Venturini M, Cesana D, Montini E, Ponzoni M, **Granucci F**, Villa A. Wiskott-Aldrich syndrome protein deficiency in natural killer and dendritic cells affects antitumor immunity. *Eur J Immunol*. 2013 Dec 13. doi: 10.1002/eji.201343935. [Epub ahead of print]
12. Gritti N, Caccia M, Sironi L, Collini M, D'Alfonso L, **Granucci F**, Zanoni I, Chirico G. Modeling leukocyte-leukocyte non-contact interactions in a lymph node. *PLoS One*. 2013 Oct 28;8(10):e76756. doi: 10.1371/journal.pone.0076756.
13. Zanoni I, Spreafico R, Bodio C, Di Gioia M, Cigni C, Broggi A, Gorletta T, Caccia M, Chirico G, Sironi L, Collini M, Colombo MP, Garbi N, **Granucci F**. IL-15 cis presentation is required for optimal NK cell activation in lipopolysaccharide-mediated inflammatory conditions. *Cell Report*. 2013 Sep 26;4(6):1235-49. doi: 10.1016/j.celrep.2013.08.021. Epub 2013 Sep 19.
14. Bissa M, Pacchioni SM, Zanotto C, De Giuli Morghen C, Illiano E, **Granucci F**, Zanoni I, Broggi A, Radaelli A. Systemically administered DNA and fowlpox recombinants expressing four vaccinia virus genes although immunogenic do not protect mice against the highly pathogenic IHD-J vaccinia strain. *Virus Res*. 2013 Dec 26;178(2):374-82.
15. Zanoni I, **Granucci F**. Role of CD14 in host protection against infections and in metabolism regulation. *Front Cell Infect Microbiol*. 2013 Jul 24;3:32. doi: 10.3389/fcimb.2013.00032. eCollection 2013.
16. Broggi A, Zanoni I, **Granucci F**. Migratory conventional dendritic cells in the induction of peripheral T cell tolerance. *J Leukoc Biol*. 2013 Nov;94(5):903-11. doi: 10.1189/jlb.0413222. Epub 2013 Jul 29.
17. **Granucci F**, Lutz MB, Zanoni I. The nature of activatory and tolerogenic dendritic cell-derived signal 2. *Front Immunol*. 2013 Jul 16;4:198. doi: 10.3389/fimmu.2013.00198. eCollection 2013..
18. **Granucci F**. EFIS-EJI Ita Askonas Award. Q&A with Francesca Granucci, winner of the EFIS-EJI Ita Askonas Award 2012. *Eur J Immunol*. 2012 Nov;42(11):2824-6.
19. Pontiroli F, Dussurget O, Zanoni I, Urbano M, Beretta O, **Granucci F**, Ricciardi-Castagnoli P, Cossart P, Foti M. The timing of IFN $\beta$  production affects early innate responses to *Listeria monocytogenes* and determines the overall outcome of lethal infection. *PLoS One*. 2012;7(8):e43455.
20. Vitali C, Mingozzi F, Broggi A, Barresi S, Zolezzi F, Bayry J, Raimondi G, Zanoni I, **Granucci F**. Migratory, and not lymphoid-resident, dendritic cells maintain peripheral self-tolerance and prevent autoimmunity via induction of iTreg cells. *Blood*. 2012 Aug 9;120(6):1237-45.

21. Zanoni I, **Granucci F**. Regulation and dysregulation of innate immunity by NFAT signaling downstream of pattern recognition receptors (PRRs). *Eur J Immunol*. 2012 Aug;42(8):1924-31.
22. Zanoni I, Ostuni R, Barresi S, Di Gioia M, Broggi A, Costa B, Marzi R and **Granucci F**. Mechanism of lipopolysaccharide-induced skin edema formation in the mouse. *J Clinical Investigation* 2012 May;122(5):1747-57. doi: 10.1172/JCI60688
23. Zanoni I, Bodio C, Broggi A, Ostuni R, Caccia M, Collini M, Venkatesh A, Spreafico R, Capuano G, **Granucci F**. Similarities and differences of innate immune responses elicited by smooth and rough LPS. *Immunol Lett*. 2011 Dec 19.
24. Zanoni I, Ostuni R, Marek LR, Barresi S, Barbalat R, Barton GM, **Granucci F\***, Kagan JC\*. CD14 controls the LPS-induced endocytosis of Toll-like receptor 4. *Cell*. 2011 Nov 11;147(4):868-80. \*equal contribution, co-corresponding
25. Sartorius R, Bettua C, D'Apice L, Caivano A, Trovato M, Russo D, Zanoni I, **Granucci F**, Mascolo D, Barba P, Del Pozzo G, De Berardinis P. Vaccination with filamentous bacteriophages targeting DEC-205 induces DC maturation and potent anti-tumor T-cell responses in the absence of adjuvants. *Eur J Immunol*. 2011 Sep;41(9):2573-84. doi: 10.1002/eji.201141526. Epub 2011 Aug 18.
26. Piazza M, Colombo M, Zanoni I, **Granucci F**, Tortora P, Weiss J, Gioannini T, Prosperi D, Peri F. Uniform lipopolysaccharide (LPS)-loaded magnetic nanoparticles for the investigation of LPS-TLR4 signaling. *Angew Chem Int Ed Engl*. 2011 Jan 17;50(3):622-6. doi: 10.1002/anie.201004655.
27. Cavalieri D, Rivero D, Beltrame L, Buschow SI, Calura E, Rizzetto L, Gessani S, Gauzzi MC, Reith W, Baur A, Bonaiuti R, Brandizi M, De Filippo C, D'Oro U, Draghici S, Dunand-Sauthier I, Gatti E, **Granucci F**, Gündel M, Kramer M, Kuka M, Lanyi A, Melief CJ, van Montfoort N, Ostuni R, Pierre P, Popovici R, Rajnavolgyi E, Schierer S, Schuler G, Soumelis V, Splendiani A, Stefanini I, Torcia MG, Zanoni I, Zollinger R, Figdor CG, Austyn JM. DC-ATLAS: a systems biology resource to dissect receptor specific signal transduction in dendritic cells. *Immunome Res*. 2010 Nov 19;6:10.
28. Villa CE, Caccia M, Sironi L, D'Alfonso L, Collini M, Rivolta I, Miserocchi G, Gorletta T, Zanoni I, **Granucci F**, Chirico G. Accumulative difference image protocol for particle tracking in fluorescence microscopy tested in mouse lymph nodes. *PLoS One*. 2010 Aug 17;5(8):e12216.
29. Guglielmetti S, Taverniti V, Minuzzo M, Arioli S, Zanoni I, Stuknyte M, **Granucci F**, Karp M, Mora D. A dairy bacterium displays in vitro probiotic properties for the pharyngeal mucosa by antagonizing group A streptococci and modulating the immune response. *Infect Immun*. 2010 Nov;78(11):4734-43. Epub 2010 Aug 23.
30. Ostuni R, Zanoni I, **Granucci F**. Deciphering the complexity of Toll-like receptor signaling. *Cell Mol Life Sci*. 2010 Dec;67(24):4109-34. Epub 2010 Jul 31.
31. Zanoni I, **Granucci F**. The regulatory role of dendritic cells in the induction and maintenance of T-cell tolerance. *Autoimmunity*. 2011 Feb;44(1):23-32. Epub 2010 Jul 29.

32. Zanoni I, **Granucci F**. Differences in lipopolysaccharide-induced signaling between conventional dendritic cells and macrophages. *Immunobiology*. 2010 Sep-Oct;215(9-10):709-12.
33. Zanoni I, **Granucci F**. Regulation of antigen uptake, migration, and lifespan of dendritic cell by Toll-like receptors. *J Mol Med (Berl)*. 2010 Sep;88(9):873-80. Epub 2010 Jun 18
34. Torri A, Beretta O, Ranghetti A, **Granucci F**, Ricciardi-Castagnoli P, Foti M. Gene expression profiles identify inflammatory signatures in dendritic cells. *PLoS One*. 2010 Feb 24;5(2).
35. Cipolla L, Redaelli C, **Granucci F**, Zampella G, Zaza A, Chisci R, Nicotra F. Straightforward synthesis of novel Akt inhibitors based on a glucose scaffold. *Carbohydr Res*. 2010 Jul 2;345(10):1291-8.
36. **Granucci F**, Zanoni I. The dendritic cell life cycle. *Cell Cycle*. 2009 Dec;8(23):3816-21. Epub 2009 Dec 4.
37. Zanoni I, Ostuni R, Capuano G, Collini M, Caccia M, Ronchi AE, Rocchetti M, Mingozzi F, Foti M, Chirico G, Costa B, Zaza A, Ricciardi-Castagnoli P, **Granucci F**. CD14 regulates the dendritic cell life cycle after LPS exposure through NFAT activation. *Nature*. 2009 Jul 9;460(7252):264-8.
38. Mortellaro A, Urbano M, Citterio S, Foti M, **Granucci F**, Ricciardi-Castagnoli P. Generation of murine growth factor-dependent long-term dendritic cell lines to investigate host-parasite interactions. *Methods Mol Biol*. 2009;531:17-27.
39. Bettoni I, Comelli F, Rossini C, **Granucci F**, Giagnoni G, Peri F, Costa B. Glial TLR4 receptor as new target to treat neuropathic pain: efficacy of a new receptor antagonist in a model of peripheral nerve injury in mice. *Glia*. 2008 Sep;56(12):1312-9.
40. **Granucci F**, Zanoni I. Role of Toll like receptor-activated dendritic cells in the development of autoimmunity. *Front Biosci*. 2008 May 1;13:4817-26.
41. Caccia M, Sironi L, Collini M, Chirico G, Zanoni I, **Granucci F**. Image filtering for two-photon deep imaging of lymph nodes. *Eur Biophys J*. 2008 Jul;37(6):979-87.
42. **Granucci F**, Zanoni I, Ricciardi-Castagnoli P. Central role of dendritic cells in the regulation and deregulation of immune responses. *Cell Mol Life Sci*. 2008
43. Foti M, Ricciardi-Castagnoli P, **Granucci F**. Gene expression profiling of dendritic cells by microarray. *Methods Mol Biol*. 2007;380:215-24.
44. Zanoni I, **Granucci F**, Foti M, Ricciardi-Castagnoli P. Self-tolerance, dendritic cell (DC)-mediated activation and tissue distribution of natural killer (NK) cells. *Immunol Lett*. 2007 May 15;110(1):6-17. Epub 2007 Apr 3.
45. Peri F, **Granucci F**, Costa B, Zanoni I, Marinzi C, Nicotra F. Inhibition of lipid a stimulated activation of human dendritic cells and macrophages by amino and hydroxylamino monosaccharides. *Angew Chem Int Ed Engl*. 2007;46(18):3308-12.

46. Redaelli C, **Granucci F**, De Gioia L, Cipolla L. Synthesis and biological activity of Akt/PI3K inhibitors. *Mini Rev Med Chem*. 2006 Oct;6(10):1127-36.
47. **Granucci F**, Zanoni I, Ricciardi-Castagnoli P. Natural killer (NK) cell functions can be strongly boosted by activated dendritic cells (DC). *Eur J Immunol*. 2006 Oct;36(10):2819-20.
48. Vizzardelli C, Pavelka N, Luchini A, Zanoni I, Bendickson L, Pelizzola M, Beretta O, Foti M, **Granucci F**, Nilsen-Hamilton M, Ricciardi-Castagnoli P. Effects of dexamethazone on LPS-induced activation and migration of mouse dendritic cells revealed by a genome-wide transcriptional analysis. *Eur J Immunol*. 2006 Jun;36(6):1504-15.
49. Foti M, **Granucci F**, Pelizzola M, Beretta O, Ricciardi-Castagnoli P. Dendritic cells in pathogen recognition and induction of immune responses: a functional genomics approach. *J Leukoc Biol*. 2006 May;79(5):913-6.
50. Raimondi G, Zanoni I, Citterio S, Ricciardi-Castagnoli P, **Granucci F**. Induction of peripheral T cell tolerance by antigen-presenting B cells. II. Chronic antigen presentation overrules antigen-presenting B cell activation. *J Immunol*. 2006 Apr 1;176(7):4021-8.
51. Raimondi G, Zanoni I, Citterio S, Ricciardi-Castagnoli P, **Granucci F**. Induction of peripheral T cell tolerance by antigen-presenting B cells. I. Relevance of antigen presentation persistence. *J Immunol*. 2006 Apr 1;176(7):4012-20.
52. Foti M, **Granucci F**, Ricciardi-Castagnoli P. Dendritic cell interactions and cytokine production. *Ernst Schering Res Found Workshop*. 2006;(56):61-80
53. **Granucci F**, Foti M, Ricciardi-Castagnoli P. Dendritic cell biology. *Adv Immunol*. 2005;88:193-233.
54. Peri F, Marinzi C, Barath M, **Granucci F**, Urbano M, Nicotra F. Synthesis and biological evaluation of novel lipid A antagonists. *Bioorg Med Chem*. 2006 Jan 1;14(1):190-9.
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56. Ossendorp F, Fu N, Camps M, **Granucci F**, Gobin SJ, van den Elsen PJ, Schuurhuis D, Adema GJ, Lipford GB, Chiba T, Sijts A, Kloetzel PM, Ricciardi-Castagnoli P, Melief CJ. Differential expression regulation of the alpha and beta subunits of the PA28 proteasome activator in mature dendritic cells. *J Immunol*. 2005 Jun 15;174(12):7815-22.
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60. Feau S, Facchinetti V, **Granucci F**, Citterio S, Jarrossay D, Seresini S, Protti MP, Lanzavecchia A, Ricciardi-Castagnoli P. Dendritic cell-derived IL-2 production is regulated by IL-15 in humans and in mice. *Blood.* 2005 Jan 15;105(2):697-702. Epub 2004 Sep 7.
61. Auwerx J, Avner P, Baldock R, Ballabio A, Balling R, Barbacid M, Berns A, Bradley A, Brown S, Carmeliet P, Chambon P, Cox R, Davidson D, Davies K, Duboule D, Forejt J, **Granucci F**, Hastie N, de Angelis MH, Jackson I, Kioussis D, Kollias G, Lathrop M, Lendahl U, Malumbres M, von Melchner H, Müller W, Partanen J, Ricciardi-Castagnoli P, Rigby P, Rosen B, Rosenthal N, Skarnes B, Stewart AF, Thornton J, Tocchini-Valentini G, Wagner E, Wahli W, Wurst W. The European dimension for the mouse genome mutagenesis program. *Nat Genet.* 2004 Sep;36(9):925-7.
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