

MANTOVANI, Alberto

Scientific Director, Istituto Clinico Humanitas
President, Humanitas Foundation for Research



RESEARCH TOPICS

Tumor biology, Chemokines and Pentraxins

EDUCATION

- 1973 M.D., University of Milan, Italy
1976 Specialist in Oncology, University of Pavia, Italy

POSITIONS

- 1994-2001 Full Professor of General Pathology, School of Medicine, University of Brescia, Italy.
1996- 2005 Head, Department of Immunology and Cell Biology, Istituto di Ricerche Farmacologiche "Mario Negri", Milan, Italy.
2001 to date Full Professor of General Pathology, School of Medicine, State University of Milan, Italy
2005 to date Scientific Director, Istituto Clinico Humanitas and President, Humanitas Foundation for Research.

AWARDS (SELECTED)

- 2006 European Federation of Immunological Societies – Schering Plough, 1st European Immunology Prize, Paris, France
2007 Galileo Galilei Prize for Research in Biomedical Sciences (International Jury composed by Ronald B Herberman, Stuart A Aaronson, Klas Karre, Reinhold E Schmidt)
2007 Premio PISO (international Jury composed by past awardees: Luc Montagnier, Anthony Fauci, Lorenzo Moretta, P. Mannuccio Mannucci)
2009 William Harvey Award, Outstanding Scientist 2009, London, UK.
2011 IMID Award for Excellence in Immunology

OTHERS

Institute for Scientific Information (ISI) ranked him as one of 100 most quoted immunologists in the world over the last 20 years of the 20th century.



Selected publications

Originals

Deban L, Castro Russo R, Sironi M, Moalli F, Scanziani M, Zambelli V, Cuccovillo I, Bastone A, Gobbi M, Valentino S, Doni A, Garlanda C, Danese S, Salvatori G, Sassano M, Evangelista V, Rossi B, Zenaro E, Constantin G, Laudanna C, Bottazzi B, Mantovani A

Binding to P-selectin and regulation of leukocyte recruitment by the long pentraxin PTX3, a key component of humoral innate immunity. *Nature Immunol.* 11: 328-334, 2010.

Di Liberto D, Locati M, Caccamo N, Vecchi A, Meraviglia S, Salerno A, Sireci G, Nebuloni M, Cardona P-J, Dieli F, Mantovani A. Role of the chemokine decoy receptor D6 in balancing inflammation, immune activation and antimicrobial resistance in *Mycobacterium tuberculosis* infection. *J. Exp. Med.* 205: 2075-2084, 2008

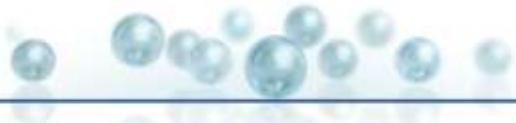
Lech M, Kulkarni OP, Pfeiffer S, Savarese E, Krug A, Garlanda C, Mantovani A, Anders H-J Tir8/Sigirr prevents murine lupus by suppressing the immunostimulatory effects of lupus autoantigens. *J. Exp. Med.* 205: 1879-1888, 2008.

Jaillon S, Peri G, Delneste Y, Frèmaux I, Doni A, Moalli F, Garlanda C, Romani L, Gascan H, Bellocchio S, Bozza S, Cassatella MA, Jeannin P, Mantovani A. The humoral pattern recognition receptor PTX3 is stored in neutrophil granules and localized in extracellular traps. *J. Exp. Med.*, 204, 793-804, 2007.

Martinez de la Torre Y, Buracchi C, Borroni EM, Dupor J, Bonecchi R, Nebuloni M, Pasqualini F, Doni A, Lauri E et al. Protection against inflammation- and autoantibody- caused fetal loss by the chemokine decoy receptor D6. *PNAS* 104:2319-2324, 2007

Biswas SK, Gangi L, Paul S, Schioppa T, Saccani A, Sironi M, Bottazzi B, Doni A, Vincenzo B, Pasqualini F, Vago L, Nebuloni M, Mantovani A*, Sica A. (* corresponding author). A distinct and unique transcriptional program expressed by tumor-associated macrophages (defective NF-kappaB and enhanced IRF-3/STAT1 activation). *Blood* 107:2112-2122, 2006.

Borrello MG, Alberti L, Fischer A, Degl'Innocenti D, Ferrario C, Gariboldi M, Marchesi F, Allavena P, Greco A, Collini P, Pilotti S, Cassinelli G, Bressan P, Fugazzola L, Mantovani A*, Pierotti M*



(*corresponding authors). Induction of a proinflammatory programme in normal human thyrocytes by the RET/PTC1 oncogene. *PNAS*, 102: 14825-14830, 2005.

Jeannin P., Bottazzi B., Sironi M., Doni A., Rusnati M., Presta M., Maina V., Magistrelli G., Haeuw J.F., Hoeffel G., Thieblemont N., Corvaia N., Garlanda C., Delneste Y., Mantovani A. Complexity and complementarity of outer membrane protein-A recognition by cellular and humoral innate immunity receptors *Immunity* 22: 551-560, 2005.

Bertini R, Allegretti M, Bizzarri C, Moriconi A, Locati M, Zampella G, Cervellera M N, Di Cioccio V, Cesta M C, Galliera E, Martinez F O, Di Bitondo R, Troiani G, Sabbatini V, Anacardio R, Cutrin J C, Cavalieri B, Mainiero F, Strippoli R, Villa P, Di Girolamo M, Martin F, Gentile M, Santoni A, Corda D, Ghezzi P, Poli Giuseppe, Mantovani A, Colotta F. A new class of non-competitive allosteric inhibitors of the inflammatory chemokine receptors CXCR1 and CXCR2: Prevention of reperfusion injury. *Proc Natl Acad Sci USA* 101: 11791-11796, 2004

Garlanda C, Riva F, Polentarutti N, Buracchi C, Sironi M, De Bortoli M, Muzio M, Bergottini R, Scanziani E, Vecchi A, Hirsch E, Mantovani A. Intestinal inflammation in mice deficient in TIR8, an inhibitory member of the IL-1 receptor family. *Proc Natl Acad Sci USA* 101: 3522-3526, 2004

Schioppa T., Uranchimeg B., Saccani A., Biswas S., Doni A., Rapisarda A., Bernasconi S., Saccani S., Nebuloni M., Vago L., Mantovani A., Melillo G., Sica A. Regulation of the chemokine receptor CXCR4 by hypoxia. *J. Exp. Med.* 198: 1391-1402, 2003

Wittamer V, Franssen J D, Vulcano M, Mirjolet J F, Le Poul E, Migeotte I, Brezillon S, Tyldesley R, Blanpain C, Dethieux M, Mantovani A, Sozzani S, Vassart G, Parmentier M, Communi D. Specific recruitment of antigen-presenting cells by Chemerin, a novel processed ligand from human inflammatory fluids. *J Exp Med* 198: 977-985, 2003

Garlanda C., Hirsch E., Bozza S., Salustri A., De Acetis M., Nota R., Maccagno A., Riva F., Bottazzi B., Peri G., Doni A., Vago L., Botto M., De Santis R., Carminati P., Siracusa G., Altruda A., Vecchi A., Romani L., Mantovani A. Non-redundant role of the long pentraxin PTX3 in anti-fungal innate immune response. *Nature* 420: 182-186, 2002.

Fraticelli P, Sironi M, Bianchi G, D'Ambrosio D, Albanesi C, Stoppacciaro A, Chieppa M, Allavena P, Ruco L, Girolomoni G, Sinigaglia F, Vecchi A, Mantovani A. Fractalkine (CX3CL1) as an amplification circuit of polarized Th1 responses. *J Clin Invest.* 107: 1173-1181, 2001



D'Amico G, Frascaroli G, Bianchi G, Doni A, Transidico P, Vecchi A, Sozzani S, Allavena P, Mantovani A. Uncoupling of inflammatory chemokine receptors by interleukin 10: Generation of functional decoys. *Nature Immunol.* 1: 387-391, 2000.

Hirsch E, Katanaev V L, Garlanda C, Azzolino O, Silengo L, Sozzani S, Mantovani A, Altruda F, Wymann M P. Central role for G protein-coupled phosphoinositide 3-kinaseγ in inflammation. *Science* 287: 1049-1053, 2000.

Muzio M, Natoli G, Saccani S, Levrero M, Mantovani A.. The human Toll signaling pathway: Divergence of nuclear factor Kb and JNK/SAPK activation upstream of tumor necrosis factor receptor-associated factor 6 (TRAF6). *J. Exp. Med.* 187: 2097-2101, 1998.

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Godiska R, Chantry D, Raport C J, Sozzani S, Allavena P, Leviten D, Mantovani A, Gray P W..Human macrophage-derived chemokine (MDC), a novel chemoattractant for monocytes,monocyte-derived dendritic cells, and natural killer cells. *J. Exp. Med.* 185: 1595-1604, 1997.

Sica, A., A. Saccani, A. Borsatti, C. A. Power, T. N. C. Wells, W. Luini, N. Polentarutti, S. Sozzani, and A. Mantovani.. Bacterial lipopolysaccharide rapidly inhibits expression of C-C chemokine receptors in human monocytes . *J. Exp. Med.* 185:969-974, 1997.



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Reviews

Sica A, Mantovani A. Macrophage plasticity and polarization: in vivo veritas. *J Clin Invest.*



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Mantovani A, Cassatella MA, Costantini C, Jaillon S. Neutrophils in the activation and regulation of innate and adaptive immunity. *Nat Rev Immunol.* 11: 519-531, 2011.

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Mantovani A, Allavena P, Sica A, Balkwill F. Cancer-Related Inflammation. *Nature* 454: 436-444, 2008.

Mantovani, A., Romero, P., Paluka, AK., Marincola, FM. Tumor immunity: effector response to tumor and the influence of the microenvironment. *Lancet* 371:771-783, 2008.

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Mantovani, A., F. Bussolino, and E. Dejana. Cytokine regulation of endothelial cell function. *FASEB J.* 6:2591-2599, 1992.

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Mantovani, A. and E. Dejana. Cytokines as communication signals between leukocytes and endothelial cells. *Immunol. Today*. 10:370-375, 1989.