

**EUROPEAN
CURRICULUM VITAE
FORMAT**



PERSONAL INFORMATION

Name **MANTOVANI ALBERTO**

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Nationality Italian

Date of birth October 29, 1948

RESEARCH EXPERIENCE

- Dates (from – to) Sept. 2005 to date
- Name and address of the employer Istituto Clinico Humanitas, Milan
- Occupation or position held Scientific Director and President, Humanitas Foundation for Research

- Dates (from – to) 2001 to date
- Name and address of the employer School of Medicine, State University of Milan, Italy
- Occupation or position held Full Professor of General Pathology

- Dates (from – to) 1996 to 2005
- Name and address of the employer Department of Immunology and Cell Biology, Istituto di Ricerche Farmacologiche "Mario Negri", Milan, Italy
- Occupation or position held Head

- Dates (from – to) 1994 to 2001
- Name and address of the employer School of Medicine, University of Brescia, Italy.
- Occupation or position held Full Professor of General Pathology

- Dates (from – to) 1987
- Name and address of the employer Laboratory of Molecular Immunoregulation, NIH, Frederick, MD., USA
- Occupation or position held Eleanor Roosevelt UICC Scholar

- Dates (from – to) 1981
- Name and address of the employer Laboratory of Immunology, Istituto di Ricerche Farmacologiche "Mario Negri", Milan, Italy
- Occupation or position held Chief

- Dates (from – to) 1979-1981
- Name and address of the employer Department of Tumor Immunology and Chemotherapy, Istituto di Ricerche Farmacologiche "Mario Negri", Milan, Italy.
- Occupation or position held Senior investigator

- Dates (from – to) 1978
- Name and address of the employer Laboratory of Immunodiagnosis, NIH, Bethesda, MD., USA
- Occupation or position held Visiting fellow supported by a NATO Grant

- Dates (from – to) 1975-1976
- Name and address of the employer Department of Tumor Immunology, Chester Research Institute, Belmont, Sutton, Surrey, England
- Occupation or position held Visiting fellow

- Dates (from – to) 1973-1975
- Name and address of the employer Department of Tumor Immunobiology and Chemotherapy, Istituto di Ricerche Farmacologiche "Mario Negri", Milan, Italy.
- Occupation or position held Research assistant

HONORS

- Dates (from-to) 2011
- Honor IMID Award for Excellence in Immunology

- Dates (from-to) 2010
- Honor Paul Kallos Lecturer, Collegium Internationale Allergologicum

- Dates (from-to) 2009
- Honor William Harvey Award Outstanding Scientist 2009

- Dates (from-to) 2007
- Honor Premio PISO (international Jury composed by past awardees: Luc Montagnier, Anthony Fauci, Lorenzo Moretta, P. Mannuccio Mannucci)

- Dates (from-to) 2007
- Honor Galileo Galilei Prize for Research in Biomedical Sciences (International Jury composed by Ronald B Herberman, Stuart A Aaronson, Klas Karre, Reinhold E Schmidt)

- Dates (from-to) 2006
- Name and type of organisation Fondazione Cassa di Risparmio di Asti
- Honor XIV Premio per la Ricerca Finalizzata alla Lotta Contro i Tumori

- Dates (from-to) 2006
- Name and type of organisation EFIS
- Honor Schering Plough 1st European Immunology Prize, Paris, France

- Dates (from-to) 2006
- Honor "Onorificenza al Merito della Repubblica Italiana" for scientific contribution by the President of the Republic of Italy

- Dates (from-to) 2004
- Honor Walter Cottman Lecturer, Monash University, Melbourne, Australia

- Date 2004
- Honor Guido Venosta Award for Cancer Research by the President of the Republic of Italy

- Date 2003
- Honor Otto Hertz Lecturer, Tel Aviv

- Date 2000
- Honor Marie T. Bonazinga Award, Boston, USA

- Date 1998
- Honor Biotec Award

- Date 1987
- Name and type of organisation Eleanor Roosevelt UICC
- Honor Fellowship

- Date 1979
- Honor Awarded a NATO fellowship

- Date 1978
- Name and type of organisation UICC, Geneva, Switzerland
Yamagiwa - Yoshida International Study grant

- Date 1975
- Name and type of organisation British Council
- Honor Fellowship

- Date 1974
- Name and type of organisation Anna Villa Rusconi Foundation
Fellowship

- Date 1973
- Name and type of organisation Italian Association Against Leukemias
- Honor Fellowship

MEMBERSHIPS AND BOARDS

- Dates (from-to) 2009
- Name and type of organisation International Cytokine Society
- Main Activities President

- Dates (from-to) 2008
- Name and type of organisation Member, Faculty of 1000 Biology
- Main Activities Member

- Dates (from-to) 2007-2009
- Name and type of organisation GAVI Alliance
- Main Activities Alternate Board Member for Italy

- Dates (from-to) 2002
- Name and type of organisation The Henry Kunkel Society
- Main Activities Member

- Dates (from-to) 2000
- Name and type of organisation European Molecular Biology Organization (EMBO)
- Main Activities Member

EDUCATION AND TRAINING

- Date 1976
- Name and type of organisation University of Pavia, Italy
providing education and training

- Title of qualification awarded Specialist in Oncology
- Date 1973
- Name and type of organisation providing education and training University of Milan, Italy
- Title of qualification awarded M.D.

MOTHER TONGUE Italian

OTHER LANGUAGES

- English**
- Reading skills EXCELLENT
 - Writing skills EXCELLENT
 - Verbal skills EXCELLENT

ANNEXES Main contributions

Main contributions

Tumor biology: First demonstration of the protumor function of tumor-associated macrophages (TAM) linking inflammation and cancer (reviewed in Balkwill and Mantovani, Lancet, 2001); TAM as a prototypic M2 population (Balkwill et al., Cancer Cell 2005); first molecular linking of a genetic event (RET/PTC rearrangement) sufficient to cause cancer in humans to the construction of an inflammatory microenvironment (Borrello et al., PNAS 2005).

Chemokines: original description of Monocyte Chemoattractant Protein-1 as tumor-derived chemotactic factor (Science 220, 210, 1983); characterization of new chemokines (e.g. macrophage derived chemokine, MDC, J. Exp. Med. 185, 1595, 1997) and role in pathophysiology. In the context of studies on the interplay between cytokines and endothelial cells, he discovered that fluid phase IL-6 receptor alpha chain forms a complex with IL-6 and activates endothelial cells, which express only the membrane bound gp130 chain (trans-signalling), to express adhesion molecules and chemokines (Romano et al, Immunity, 1997). This discovery was seminal to the identification of a key function of IL-6 in the transition from acute to chronic inflammation and paved the way to the development of anti-IL-6 strategies in the clinic. Characterization of D6 as a decoy receptor for inflammatory CC chemokines (Fra, Locati et al, J.Immunol. 2001; Nature Rev. Immunol: solicited review under revision).

IL-1/Toll: endothelial cell activation by IL-1 and cytokines (Science 229, 174, 1985; Nature 337, 471, 1989); identification of the type II receptor as a decoy anti-IL-1 molecule, a concept now extended to molecules in the TNF, IL-10 and IL-18 receptor families (Colotta, Science 261: 472-475, 1993); cloning of an intracellular isoform of IL-1ra (Muzio et al., J. Exp. Med. 182: 623-628, 1995); first demonstration of MyD88 as the adaptor of TLR and downstream transducers (Muzio et al., J. Exp. Med 187: 2097-2101, 1998).

Pentraxins: cloning (cDNA and genomic, mouse and human) structural and functional characterization of the first long pentraxin PTX3 (J. Biol. Chem. 272, 32817, 1997; Nature 420: 182, 2002; Immunity 22: 551-560, 2005).

Impact

For several years now, bibliometric analyses have indicated that he is one of the, or the, most quoted and /or productive Italian scientist(s). In particular the 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. As to winter 2011 he has had over 41.993 citations and an H index of 126.

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.

Bonecchi R, Borroni EM, Anselmo A, Doni A, Savino B, Mirolo M, Fabbri M, Jala VR, Haribabu B, Mantovani A, Locati M Regulation of D6 chemokine scavenging activity by ligand and Rab11-dependent surface upregulation. Blood 112: 493-503, 2008.

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
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- 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.
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- Hirsch E, Katanaev V L, Garlanda C, Azzolino O, Silengo L, Sozzani S, Mantovani A, Altruda F, Wymann M P. 2000. Central role for G protein-coupled phosphoinositide 3-kinase in inflammation. *Science* 287: 1049-1053.
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- Colotta, F., F. Re, M. Muzio, R. Bertini, N. Polentarutti, M. Sironi, J. G. Giri, S. K. Dower, J. E. Sims, and A. Mantovani. 1993. Interleukin-1 type II receptor: a decoy target for IL-1 that is regulated by IL-4. *Science* 261:472-475.
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- Bottazzi, B., N. Polentarutti, R. Acero, A. Balsari, D. Boraschi, P. Ghezzi, M. Salmona, and A. Mantovani. 1983. Regulation of the macrophage content of neoplasms by chemoattractants. *Science* 220:210-212.
- Reviews**
- Bottazzi B, Doni A, Garlanda C, Mantovani A. An Integrated View of Humoral Innate Immunity: Pentraxins as a Paradigm. *Annu Rev Immunol.* 28: 157-183, 2010.
- Mantovani A. Cancer: Inflaming metastasis. *Nature* 45: 36-37, 2009.
- 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
- Mantovani A. Cancer: an infernal triangle. *Nature* 448: 547-548, 2007.
- Mantovani A, Bonecchi R, Locati M. Tuning inflammation and immunity by chemokine sequestration: decoys and more. *Nat. Rev. Immunol.* 6: 907-918, 2006.
- Mantovani A, Balkwill F. RalB signaling: a bridge between inflammation and cancer. *Cell* 127: 8-10, 2006.
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Mantovani A, Garlanda C. Inflammation and multiple myeloma: the Toll connection. *Leukemia*. 20: 937-938, 2006.

Mantovani A. Cancer. Inflammation by remote control. *Nature* 435: 752-753, 2005.

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Garlanda C., Bottazzi B., Bastone A., Mantovani A., Pentraxins at the crossroads between innate immunity, inflammation, matrix deposition, and female fertility *Annu. Rev. Immunol.*, 23: 337-366, 2005.

Mantovani A., Sica A., Sozzani S., Allavena P., Vecchi A., Locati M. 2004. The chemokine system in diverse forms of macrophage activation and polarization. *Trends Immunol.* 25: 677-686,

Mantovani A., Sozzani S., Locati M., Allavena P., Sica A. Macrophage polarization: tumor-associated macrophages as a paradigm for polarized M2 mononuclear phagocytes. 2002. *Trends Immunol.* 23: 549-555.

Mantovani A., Locati M., Vecchi A., Sozzani S., Allavena P. Decoy receptors as a strategy to regulate inflammatory cytokines and chemokines. 2001. *Trends Immunol.* 22: 328-336.

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

Mantovani, A., B. Bottazzi, F. Colotta, S. Sozzani, and L. Ruco. 1992. The origin and function of tumor-associated macrophages. *Immunol. Today*. 13:265-270.

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

Il sottoscritto prof. Alberto Mantovani autorizza il trattamento dei dati personali ai sensi e per gli effetti del D. Lgs. n. 196 del 30/6/2003.