

## CALOGERO CARUSO'S CV

### FULL PROFESSOR OF GENERAL PATHOLOGY

Born in Palermo, December 1<sup>st</sup>, 1947. EDUCATION – M.D. School of Medicine, University of Palermo, 1971 (magna cum laude); Postgraduate in Internal Medicine, University of Palermo, 1976; Postgraduate in General Pathology, Rome, 1978; 1981; Fellow at Department of Immunohematology, University of Leiden (NL) (January - October).

EMPLOYMENT - 1974 - 1994. Research Assistant, Assistant Professor, Associated Professor, Institute of General Pathology (by now Department of Pathobiology and Biomedical Methodologies), University of Palermo. From 1994 to date, Full Professor of General Pathology, Department of Pathobiology and Biomedical Methodologies, School of Medicine, University of Palermo. From 1995 to date, Chief of Immunopathology Unity, and from 2005 to date Chief of Immunohaematology and Transfusion Medicine, University Hospital “Paolo Giaccone”, University of Palermo. From 1997 to date, Director of Postgraduate School in Immunology, Department of Pathobiology and Biomedical Methodologies, School of Medicine, University of Palermo. From 1998, to date Director of Ph.D. Course Pathobiology (Immunosenescence), Department of Pathobiology and Biomedical Methodologies, School of Medicine, University of Palermo. From 1999 to 2008, Director of Postgraduate School in Laboratory Medicine, Department of Pathobiology and Biomedical Methodologies, School of Medicine, University of Palermo.

GRANTS – In the last years his scientific activity has been supported by: Ministry of Education, University and Research (MIUR): FIRB project on Identification of nuclear and mitochondria genes in age-related inflammatory diseases; Palermo Town (and Province) Council grants (to study immunosenescence biomarkers in aged people in charge to Town, or Province, Council); University of Palermo (international collaboration with University of Tubingen to study Immunosenescence; international collaboration with University of Belfast to study Immunogenetics of Longevity; international collaboration with University of London to study biomarkers of Immunosenescence; international collaboration with Universities of Konstanz, Leiden and Tubingen to study HLA and other factors able to influence life expectance); Sicilian government (to study immune response and breast cancer). He has been a Coordinator of a research project supported by MIUR (1999-2001) (ex 40%, Immunogenetics of Longevity) that included the Universities of Trieste, Bologna, Modena, and Firenze. He is a coordinator of a cooperation contract with National Aging Institute of Ancona (INRCA) to study Longevity and elderly disability biological markers. He is a local coordinator of several studies supported by Italian Ministry of Health (Immunological parameters age-related; Pharmacogenetics of Alzheimer; Genetic markers of coronaric acute syndrome), coordinated by INRCA, (Markers of Metabolic Syndrome) coordinated by Institute De Bellis of Castellana (Bari) and coordinated by Palermo University (Molecular mechanisms of stem cancer cell survival control). He is a local coordinator of a national study supported by Italian Ministry of University (Does parental longevity impact on the health ageing of their offspring? An immunological and genetic study). He has been a national coordinator of a study supported by Italian Ministry of Health (Immunogenetics of successful ageing). His laboratory has participated to EU-supported (European Fifth Framework Programme, 1998-2002, “Quality of Life and Management of Living Resources”) Thematic Network on Immunology and Ageing in Europe (ImAginE), whose he has been member of Steering Committee. His laboratory participates as associate member to LINK-AGE, a coordination action financed by the 6th Framework Program of the European Commission, aimed at identify and help the implementation of common research strategies and the generation of a critical mass and added value for European biogerontology research.

CONGRESSES - He organized the 3rd ImAginE Conference on the basic Biology and Clinical Impact of Immunosenescence Palermo 10-14 April 2002. Previously, he organized the international Congress (Palermo 28, 29 Ottobre 1999) “Immunology as a tool for public health” and, together

with Palermo Town, the Workshop “The resources of age: to be women and elderly in Palermo” (Palermo 2 April 2001). In 2003 organized the Italian Congress on Immunogenetics (Palermo October, 2003) and in 2005 the course titled “The laboratory in neuroimmunology” (Palermo 13,14 September). He organized in 2006 with ISMETT and Elsevier the 3rd International Conference on Functional Genomics of Ageing (Palermo, March 29–April 1, 2006) and with Oncology Department of ARNAS-Civico Hospital of Palermo the 132nd Advanced course on Estrogens and Human disease (E. Majorana, Scientific Center, ERICE May 15-21, 2006). He organized in 2007 the International Symposium on Pathophysiology of ageing and age-related diseases (Palermo April 18, 2007). He is member of the Scientific Board of European Project SENECA, that has organized an international Congress on Cancer and Ageing (Warsaw October, 2007). In December 2007, he organized in Taormina an international Workshop of Anti-ageing Medicine. Last April he has organised an International Meeting on Pathophysiology of Successful and Unsuccessful Ageing (Palermo April 7,8).

REFEREE – He has served as referee for the following journals: *Aging Cell*, *American Heart Journal*, *American Journal of Genetics*, *Annals of Human Genetics*, *Antioxidants & Redox Signaling*, *Archives of Medical Research*, *Blood*, *BMC Genetics*, *BMC Geriatrics*, *BMC Medicine*, *BMC Neurology*, *British J Haematology*, *Cancer Immunology Immunotherapy* (he is member of the Editorial Board), *Circulation*, *Clinical Endocrinology*, *Clinical Interventions in Aging*, *Digestive and liver disease*, *European Journal of Immunogenetics*, *Experimental Aging Research*, *Experimental Gerontology* (he is Guest co-editor of an issue devoted to the The extreme longevity: The state of the art in Italy), *Expert Review of Clinical Immunology*, *Expert Review of Ophthalmology*, *Expert Review of Proteomics*, *Genes & Immunity*, *Heart and Vessels*, *Human Immunology*, *Human Molecular Genetics*, *Immunology and Cell Biology*, *Immunopharmacology and Immunotoxicology* (he is member of the Editorial Board), *International Immunology*, *International Journal of Cardiology*, *International Journal of Cancer*, *International Journal of Wine Research*, *JAMA*, *Journal Alzheimer Disease*, *Journal Clinical Immunology* (he is member of the Editorial Board), *Journal Medical Genetics*, *Journal Neuroimmunology*, *Journal Neuroinflammation*, *Journal of Neurology*, *Neurosurgery & Psychiatry*, *Journal Vascular Research*, *Life Sciences*, *Mechanisms of Ageing and Development* (he was also Guest co-editor of an issue of *MAD* devoted to the proceedings of ImAginE Conference), *Mediators of Inflammation*, *Neurobiology of Ageing*, *Neuropsychiatric Genetics*, *Pediatr Infect Dis J.*, *Pharmacogenomics*, *Physiology*, *Proteomics*, *Recent Papents on CNS Drug Discovery*, *Rejuvenation Research*, *Scandinavian J Immunology*, *Scandinavian J. of Infectious Diseases*, *Trends in Biotechnology*; *Trends in Immunology*. He is editor in Chief of the an online journal *Immunity & Ageing* supported by BioMedCentral ([www.immunityageing.com](http://www.immunityageing.com)) and has been , Executive Editor of two issues of *Current Pharmaceutical Design* (Drug targets in ageing and age-associated diseases; Low grade inflammation as a common pathogenetic denominator in chronic diseases: Novel drug targets for maintaining longevity). Referee of MIUR (PRIN and FIRB projects and CIVR, Committees for the evaluation of research in Italy), European Union (INTAS projects), Vienna Science and Technology Fund, English Charity Research into ageing, Medical Research Council and l’Alzheimer’s Association. He has been Italian Delegate to European Union 5th Framework Programme.

PUBLICATIONS – Member of British Society for Immunology, British Society for Research on Ageing, Italian Society of Immunology, Immunopathology and Clinical Immunology, Italian Society of Pathology, Italian Society of Immunogenetics, Italian Society of Transfusion Medicine and Immunohaematology, European Foundation for Immunogenetics and Neuroscience Society. In the last 5 years he has published more than 100 papers on international journals indexed on ISI and/or Pubmed on his principal fields of expertise: Immunogenetics, Immunosenescence and Immunopathology.

## LIST OF ISI PUBLICATIONS OCTOBER 2004-SEPTEMBER 2009

- 1: Colonna-Romano G, Bulati M, Aquino A, Pellicanò M, Vitello S, Lio D, Candore G, Caruso C. A double-negative (IgD-CD27-) B cell population is increased in the peripheral blood of elderly people. *Mech Ageing Dev.* 2009 Oct;130(10):681-90. Epub 2009 Aug 19. PubMed PMID: 19698733.
- 2: Forte GI, Scola L, Bellavia D, Vaccarino L, Sanacore M, Sisino G, Scazzone C, Caruso C, Barbieri R, Lio D. Characterization of two alternative Interleukin(IL)-10 5'UTR mRNA sequences, induced by lipopolysaccharide (LPS) stimulation of peripheral blood mononuclear cells. *Mol Immunol.* 2009 Jul;46(11-12):2161-6. Epub 2009 May 27. PubMed PMID: 19477525.
- 3: Balistreri CR, Colonna-Romano G, Lio D, Candore G, Caruso C. TLR4 polymorphisms and ageing: implications for the pathophysiology of age-related diseases. *J Clin Immunol.* 2009 Jul;29(4):406-15. Epub 2009 May 21. Review. PubMed PMID: 19459036.
- 4: Di Bona D, Candore G, Franceschi C, Licastro F, Colonna-Romano G, Cammà C, Lio D, Caruso C. Systematic review by meta-analyses on the possible role of TNF-alpha polymorphisms in association with Alzheimer's disease. *Brain Res Rev.* 2009 Oct;61(2):60-8. Epub 2009 May 13. PubMed PMID: 19445962.
- 5: Forte GI, Scola L, Misiano G, Milano S, Mansueto P, Vitale G, Bellanca F, Sanacore M, Vaccarino L, Rini GB, Caruso C, Cillari E, Lio D, Mansueto S. Relevance of gamma interferon, tumor necrosis factor alpha, and interleukin-10 gene polymorphisms to susceptibility to Mediterranean spotted fever. *Clin Vaccine Immunol.* 2009 Jun;16(6):811-5. Epub 2009 Apr 22. PubMed PMID: 19386798; PubMed Central PMCID: PMC2691057.
- 6: Balistreri CR, Carruba G, Calabrò M, Campisi I, Di Carlo D, Lio D, Colonna-Romano G, Candore G, Caruso C. CCR5 proinflammatory allele in prostate cancer risk: a pilot study in patients and centenarians from Sicily . *Ann N Y Acad Sci.* 2009 Feb;1155:289-92. PubMed PMID: 19250219.
- 7: Scola L, Giacalone A, Marasà L, Mirabile M, Vaccarino L, Forte GI, Giannitrapani L, Caruso C, Montalto G, Lio D. Genetic determined downregulation of both type 1 and type 2 cytokine pathways might be protective against pancreatic cancer. *Ann N Y Acad Sci.* 2009 Feb;1155:284-8. PubMed PMID: 19250218.
- 8: Caruso C, Balistreri CR, Candore G, Carruba G, Colonna-Romano G, Di Bona D, Forte GI, Lio D, Listì F, Scola L, Vasto S. Polymorphisms of pro-inflammatory genes and prostate cancer risk: a pharmacogenomic approach. *Cancer Immunol Immunother.* 2009 Dec;58(12):1919-33. Epub 2009 Feb 17. PubMed PMID: 19221747.
- 9: Balistreri CR, Grimaldi MP, Chiappelli M, Licastro F, Castiglia L, Listì F, Vasto S, Lio D, Caruso C, Candore G. Association between the polymorphisms of TLR4 and CD14 genes and Alzheimer's disease. *Curr Pharm Des.* 2008;14(26):2672-7. PubMed PMID: 19006850.

- 10: Magrone T, Candore G, Caruso C, Jirillo E, Covelli V. Polyphenols from red wine modulate immune responsiveness: biological and clinical significance. *Curr Pharm Des.* 2008;14(26):2733-48. Review. PubMed PMID: 18991692.
- 11: Listì F, Caruso M, Incalcaterra E, Hoffmann E, Caimi G, Balistreri CR, Vasto S, Scafidi V, Caruso C, Candore G. Pro-inflammatory gene variants in myocardial infarction and longevity: implications for pharmacogenomics. *Curr Pharm Des.* 2008;14(26):2678-85. PubMed PMID: 18991687.
- 12: Jirillo E, Candore G, Magrone T, Caruso C. A scientific approach to anti-ageing therapies: state of the art. *Curr Pharm Des.* 2008;14(26):2637-42. PubMed PMID: 18991682.
- 13: Di Bona D, Vasto S, Capurso C, Christiansen L, Deiana L, Franceschi C, Hurme M, Mocchegiani E, Rea M, Lio D, Candore G, Caruso C. Effect of interleukin-6 polymorphisms on human longevity: a systematic review and meta-analysis. *Ageing Res Rev.* 2009 Jan;8(1):36-42. Epub 2008 Sep 27. Review. PubMed PMID: 18930842.
- 14: Di Bona D, Plaia A, Vasto S, Cavallone L, Lescai F, Franceschi C, Licastro F, Colonna-Romano G, Lio D, Candore G, Caruso C. Association between the interleukin-1beta polymorphisms and Alzheimer's disease: a systematic review and meta-analysis. *Brain Res Rev.* 2008 Nov;59(1):155-63. Epub 2008 Jul 21. Review. PubMed PMID: 18675847.
- 15: Vasto S, Carruba G, Lio D, Colonna-Romano G, Di Bona D, Candore G, Caruso C. Inflammation, ageing and cancer. *Mech Ageing Dev.* 2009 Jan-Feb;130(1-2):40-5. Epub 2008 Jul 10. Review. PubMed PMID: 18671998.
- 16: Giacconi R, Caruso C, Malavolta M, Lio D, Balistreri CR, Scola L, Candore G, Muti E, Mocchegiani E. Pro-inflammatory genetic background and zinc status in old atherosclerotic subjects. *Ageing Res Rev.* 2008 Dec;7(4):306-18. Epub 2008 Jun 19. Review. PubMed PMID: 18611449.
- 17: Colonna-Romano G, Bulati M, Aquino A, Vitello S, Lio D, Candore G, Caruso C. B cell immunosenescence in the elderly and in centenarians. *Rejuvenation Res.* 2008 Apr;11(2):433-9. PubMed PMID: 18442327.
- 18: Candore G, Balistreri CR, Colonna-Romano G, Grimaldi MP, Lio D, Listi' F, Scola L, Vasto S, Caruso C. Immunosenescence and anti-immunosenescence therapies: the case of probiotics. *Rejuvenation Res.* 2008 Apr;11(2):425-32. Review. PubMed PMID: 18442326.
- 19: Balistreri CR, Candore G, Mirabile M, Lio D, Caimi G, Incalcaterra E, Caruso M, Hoffmann E, Caruso C. TLR2 and age-related diseases: potential effects of Arg753Gln and Arg677Trp polymorphisms in acute myocardial infarction. *Rejuvenation Res.* 2008 Apr;11(2):293-6. PubMed PMID: 18442320.
- 20: Forte GI, Calà C, Scola L, Crivello A, Gullo A, Marasà L, Giacalone A, Bonura C, Caruso C, Lio D, Giammanco A. Role of environmental and genetic factor interaction in age-related disease development: the gastric cancer paradigm. *Rejuvenation Res.* 2008 Apr;11(2):509-12. PubMed PMID: 18393655.

- 21: Balistreri CR, Candore G, Caruso M, Incalcaterra E, Franceschi C, Caruso C. Role of polymorphisms of CC-chemokine receptor-5 gene in acute myocardial infarction and biological implications for longevity. *Haematologica*. 2008 Apr;93(4):637-8. PubMed PMID: 18379014.
- 22: Di Vita G, Patti R, Sparacello M, Balistreri CR, Candore G, Caruso C. Impact of different texture of polypropylene mesh on the inflammatory response. *Int J Immunopathol Pharmacol*. 2008 Jan-Mar;21(1):207-14. PubMed PMID: 18336747.
- 23: Candore G, Balistreri CR, Caruso M, Grimaldi MP, Incalcaterra E, Listì F, Vasto S, Caruso C. Pharmacogenomics: a tool to prevent and cure coronary heart disease. *Curr Pharm Des*. 2007;13(36):3726-34. Review. PubMed PMID: 18220812.
- 24: Vasto S, Candore G, Listì F, Balistreri CR, Colonna-Romano G, Malavolta M, Lio D, Nuzzo D, Mocchegiani E, Di Bona D, Caruso C. Inflammation, genes and zinc in Alzheimer's disease. *Brain Res Rev*. 2008 Jun;58(1):96-105. Epub 2007 Dec 8. Review. PubMed PMID: 18190968.
- 25: Vasto S, Candore G, Duro G, Lio D, Grimaldi MP, Caruso C. Alzheimer's disease and genetics of inflammation: a pharmacogenomic vision. *Pharmacogenomics*. 2007 Dec;8(12):1735-45. Review. PubMed PMID: 18086003.
- 26: Licastro F, Chiapelli M, Caldarera CM, Caruso C, Lio D, Corder EH. Acute myocardial infarction and proinflammatory gene variants. *Ann N Y Acad Sci*. 2007 Nov;1119:227-42. PubMed PMID: 18056971.
- 27: Balistreri CR, Candore G, Listì F, Fazio T, Gangi S, Incalcaterra E, Caruso M, Vecchi ML, Lio D, Caruso C. Role of TLR4 polymorphisms in inflammatory responses: implications for unsuccessful aging. *Ann N Y Acad Sci*. 2007 Nov;1119:203-7. PubMed PMID: 18056968.
- 28: Di Lorenzo G, Mansueto P, Ditta V, Esposito-Pellitteri M, Lo Bianco C, Leto-Barone MS, D'Alcamo A, Farina C, Di Fede G, Gervasi F, Caruso C, Rini G. Similarity and differences in elderly patients with fixed airflow obstruction by asthma and by chronic obstructive pulmonary disease. *Respir Med*. 2008 Feb;102(2):232-8. Epub 2007 Nov 19. PubMed PMID: 18006291.
- 29: Candore G, Campagna AM, Cuppari I, Di Carlo D, Mineo C, Caruso C. Genetic control of immune response in carriers of the 8.1 ancestral haplotype: correlation with levels of IgG subclasses: its relevance in the pathogenesis of autoimmune diseases. *Ann N Y Acad Sci*. 2007 Sep;1110:151-8. PubMed PMID: 17911430.
- 30: Scola L, Lio D, Candore G, Forte GI, Crivello A, Colonna-Romano G, Pes MG, Carru C, Ferrucci L, Deiana L, Baggio G, Franceschi C, Caruso C. Analysis of HLA-DRB1, DQA1, DQB1 haplotypes in Sardinian centenarians. *Exp Gerontol*. 2008 Feb;43(2):114-8. Epub 2007 Jul 4. PubMed PMID: 17714903; PubMed Central PMCID: PMC2645697.
- 31: Franceschi C, Motta L, Motta M, Malaguarnera M, Capri M, Vasto S, Candore G,

Caruso C; IMUSCE. The extreme longevity: the state of the art in Italy. *Exp Gerontol.* 2008 Feb;43(2):45-52. Epub 2007 Jul 1. PubMed PMID: 17703905.

32: Capri M, Salvioli S, Monti D, Caruso C, Candore G, Vasto S, Olivieri F, Marchegiani F, Sansoni P, Baggio G, Mari D, Passarino G, De Benedictis G, Franceschi C. Human longevity within an evolutionary perspective: the peculiar paradigm of a post-reproductive genetics. *Exp Gerontol.* 2008 Feb;43(2):53-60. Epub 2007 Jul 1. Review. PubMed PMID: 17692487.

33: Bürkle A, Caselli G, Franceschi C, Mariani E, Sansoni P, Santoni A, Vecchio G, Witkowski JM, Caruso C. Pathophysiology of ageing, longevity and age related diseases. *Immun Ageing.* 2007 Aug 2;4:4. PubMed PMID: 17683521; PubMed Central PMCID: PMC1973075.

34: Lio D, Malaguarnera M, Maugeri D, Ferlito L, Bennati E, Scola L, Motta M, Caruso C. Laboratory parameters in centenarians of Italian ancestry. *Exp Gerontol.* 2008 Feb;43(2):119-22. Epub 2007 Jul 1. PubMed PMID: 17681733.

35: Colonna-Romano G, Akbar AN, Aquino A, Bulati M, Candore G, Lio D, Ammatuna P, Fletcher JM, Caruso C, Pawelec G. Impact of CMV and EBV seropositivity on CD8 T lymphocytes in an old population from West-Sicily. *Exp Gerontol.* 2007 Oct;42(10):995-1002. Epub 2007 May 23. PubMed PMID: 17611062.

36: Forte GI, Piccione M, Scola L, Crivello A, Galfano C, Corsi MM, Chiappelli M, Candore G, Giuffrè M, Verna R, Licastro F, Corsello G, Caruso C, Lio D. Apolipoprotein E genotypic frequencies among Down syndrome patients imply early unsuccessful aging for ApoE4 carriers. *Rejuvenation Res.* 2007 Sep;10(3):293-9. PubMed PMID: 17559337.

37: Balistreri CR, Caruso C, Grimaldi MP, Listì F, Vasto S, Orlando V, Campagna AM, Lio D, Candore G. CCR5 receptor: biologic and genetic implications in age-related diseases. *Ann N Y Acad Sci.* 2007 Apr;1100:162-72. Review. PubMed PMID: 17460174.

38: Listì F, Caruso C, Balistreri CR, Grimaldi MP, Caruso M, Caimi G, Hoffmann E, Lio D, Candore G. PECAM-1/CD31 in infarction and longevity. *Ann N Y Acad Sci.* 2007 Apr;1100:132-9. PubMed PMID: 17460171.

39: Grimaldi MP, Vasto S, Balistreri CR, di Carlo D, Caruso M, Incalcaterra E, Lio D, Caruso C, Candore G. Genetics of inflammation in age-related atherosclerosis: its relevance to pharmacogenomics. *Ann N Y Acad Sci.* 2007 Apr;1100:123-31. Review. PubMed PMID: 17460170.

40: Vasto S, Mocchegiani E, Malavolta M, Cuppari I, Listì F, Nuzzo D, Ditta V, Candore G, Caruso C. Zinc and inflammatory/immune response in aging. *Ann N Y Acad Sci.* 2007 Apr;1100:111-22. Review. PubMed PMID: 17460169.

41: Candore G, Balistreri CR, Listì F, Grimaldi MP, Vasto S, Colonna-Romano G, Franceschi C, Lio D, Caselli G, Caruso C. Immunogenetics, gender, and longevity. *Ann N Y Acad Sci.* 2006 Nov;1089:516-37. Review. PubMed PMID: 17261795.

- 42: Candore G, Balistreri CR, Campagna AM, Colombo A, Cuppari I, Di-Carlo D, Grimaldi MP, Orlando V, Piazza G, Vasto S, Lio D, Caruso C. Genetic control of immune response in carriers of ancestral haplotype 8.1: the study of chemotaxis. *Ann N Y Acad Sci.* 2006 Nov;1089:509-15. PubMed PMID: 17261794.
- 43: Candore G, Piazza G, Crivello A, Grimaldi MP, Orlando V, Caruso M, Caimi G, Hoffmann E, Incalcaterra E, Lio D, Caruso C. Association between platelet glycoprotein Ib-alpha and myocardial infarction: results of a pilot study performed in male and female patients from Sicily. *Ann N Y Acad Sci.* 2006 Nov;1089:502-8. PubMed PMID: 17261793.
- 44: Nuzzo D, Vasto S, Balistreri CR, Di-Carlo D, Listi F, Caimi G, Caruso M, Hoffmann E, Incalcaterra E, Lio D, Caruso C, Candore G. Role of proinflammatory alleles in longevity and atherosclerosis: results of studies performed on -1562C/T MMP-9 in centenarians and myocardial infarction patients from Sicily. *Ann N Y Acad Sci.* 2006 Nov;1089:496-501. PubMed PMID: 17261792.
- 45: Listi F, Candore G, Modica MA, Russo M, Di Lorenzo G, Esposito-Pellitteri M, Colonna-Romano G, Aquino A, Bulati M, Lio D, Franceschi C, Caruso C. A study of serum immunoglobulin levels in elderly persons that provides new insights into B cell immunosenescence. *Ann N Y Acad Sci.* 2006 Nov;1089:487-95. PubMed PMID: 17261791.
- 46: Candore G, Balistreri CR, Grimaldi MP, Vasto S, Listi F, Chiappelli M, Licastro F, Lio D, Caruso C. Age-related inflammatory diseases: role of genetics and gender in the pathophysiology of Alzheimer's disease. *Ann N Y Acad Sci.* 2006 Nov;1089:472-86. Review. PubMed PMID: 17261790.
- 47: Balistreri CR, Grimaldi MP, Vasto S, Listi F, Chiappelli M, Licastro F, Lio D, Caruso C, Candore G. Association between the polymorphism of CCR5 and Alzheimer's disease: results of a study performed on male and female patients from Northern Italy. *Ann N Y Acad Sci.* 2006 Nov;1089:454-61. PubMed PMID: 17261788.
- 48: Scola L, Vaglica M, Crivello A, Palmeri L, Forte GI, Macaluso MC, Giacalone A, Di Noto L, Bongiovanni A, Raimondi C, Accardo A, Verna R, Candore G, Caruso C, Lio D, Palmeri S. Cytokine gene polymorphisms and breast cancer susceptibility. *Ann N Y Acad Sci.* 2006 Nov;1089:104-9. PubMed PMID: 17261759.
- 49: Crivello A, Giacalone A, Vaglica M, Scola L, Forte GI, Macaluso MC, Raimondi C, Di Noto L, Bongiovanni A, Accardo A, Candore G, Palmeri L, Verna R, Caruso C, Lio D, Palmeri S. Regulatory cytokine gene polymorphisms and risk of colorectal carcinoma. *Ann N Y Acad Sci.* 2006 Nov;1089:98-103. PubMed PMID: 17261758.
- 50: Vasto S, Candore G, Balistreri CR, Caruso M, Colonna-Romano G, Grimaldi MP, Listi F, Nuzzo D, Lio D, Caruso C. Inflammatory networks in ageing, age-related diseases and longevity. *Mech Ageing Dev.* 2007 Jan;128(1):83-91. Epub 2006 Nov 21. Review. PubMed PMID: 17118425.
- 51: Candore G, Balistreri CR, Grimaldi MP, Listi F, Vasto S, Chiappelli M, Licastro F, Colonna-Romano G, Lio D, Caruso C. Polymorphisms of pro-inflammatory

genes and Alzheimer's disease risk: a pharmacogenomic approach. *Mech Ageing Dev.* 2007 Jan;128(1):67-75. Epub 2006 Nov 20. Review. PubMed PMID: 17116319.

52: Giacconi R, Caruso C, Lio D, Muti E, Cipriano C, Costarelli L, Saba V, Gasparini N, Malavolta M, Mocchegiani E. CD14 C (-260)T polymorphism, atherosclerosis, elderly: role of cytokines and metallothioneins. *Int J Cardiol.* 2007 Aug 9;120(1):45-51. Epub 2006 Nov 13. PubMed PMID: 17098305.

53: Salvioli S, Olivieri F, Marchegiani F, Cardelli M, Santoro A, Bellavista E, Mishto M, Invidia L, Capri M, Valensin S, Sevini F, Cevenini E, Celani L, Lescai F, Gonos E, Caruso C, Paolisso G, De Benedictis G, Monti D, Franceschi C. Genes, ageing and longevity in humans: problems, advantages and perspectives. *Free Radic Res.* 2006 Dec;40(12):1303-23. Review. PubMed PMID: 17090420.

54: Listì F, Candore G, Grimaldi MP, Lio D, Colonna-Romano G, Orlando V, Caruso M, Hoffmann E, Paolisso G, Franceschi C, Caruso C. Alpha1-antitrypsin heterozygosity plays a positive role in attainment of longevity. *Biogerontology.* 2007 Apr;8(2):139-45. Epub 2006 Sep 20. PubMed PMID: 17048073.

55: Licata G, Tuttolomondo A, Corrao S, Di Raimondo D, Fernandez P, Caruso C, Avellone G, Pinto A. Immunoinflammatory activation during the acute phase of lacunar and non-lacunar ischemic stroke: association with time of onset and diabetic state. *Int J Immunopathol Pharmacol.* 2006 Jul-Sep;19(3):639-46. PubMed PMID: 17026849.

56: Vasto S, Mocchegiani E, Candore G, Listì F, Colonna-Romano G, Lio D, Malavolta M, Giacconi R, Cipriano C, Caruso C. Inflammation, genes and zinc in ageing and age-related diseases. *Biogerontology.* 2006 Oct-Dec;7(5-6):315-27. Review. PubMed PMID: 16972155.

57: Listì F, Candore G, Balistreri CR, Caruso M, Incalcaterra E, Hoffmann E, Lio D, Caruso C. Connexin37 1019 gene polymorphism in myocardial infarction patients and centenarians. *Atherosclerosis.* 2007 Apr;191(2):460-1. Epub 2006 Sep 12. PubMed PMID: 16970956.

58: Giacconi R, Cipriano C, Muti E, Costarelli L, Malavolta M, Caruso C, Lio D, Mocchegiani E. Involvement of -308 TNF-alpha and 1267 Hsp70-2 polymorphisms and zinc status in the susceptibility of coronary artery disease (CAD) in old patients. *Biogerontology.* 2006 Oct-Dec;7(5-6):347-56. PubMed PMID: 16953332.

59: Licastro F, Porcellini E, Caruso C, Lio D, Corder EH. Genetic risk profiles for Alzheimer's disease: integration of APOE genotype and variants that up-regulate inflammation. *Neurobiol Aging.* 2007 Nov;28(11):1637-43. Epub 2006 Aug 22. PubMed PMID: 16930778.

60: Crivello A, Giacalone A, Scola L, Forte GI, Nuzzo D, Giacconi R, Cipriano C, Candore G, Mocchegiani E, Colonna-Romano G, Lio D, Caruso C. Frequency of polymorphisms of signal peptide of TGF-beta1 and -1082G/A SNP at the promoter region of Il-10 gene in patients with carotid stenosis. *Ann N Y Acad Sci.* 2006 May;1067:288-93. PubMed PMID: 16804000.

61: Candore G, Aquino A, Balistreri CR, Bulati M, Di Carlo D, Grimaldi MP, Listi F, Orlando V, Vasto S, Caruso M, Colonna-Romano G, Lio D, Caruso C. Inflammation, longevity, and cardiovascular diseases: role of polymorphisms of TLR4. *Ann N Y Acad Sci.* 2006 May;1067:282-7. PubMed PMID: 16803999.

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