



## Curriculum Vitae

Personal information **Maria Chamorro Somoza Diaz-Sarmiento**

### Work experience

1. Employer: Agencia Española de Medicamentos y Productos Sanitarios (AEMPS)
  - Start date: 042012
  - End date:
  - Position: Quality Assessor Biological and Biotechnology Division
  - Activities: \_ Plasma Masterfile File assessor \_ Quality assessment of blood\_derived and other biological medicinal products for human use, including new applications and variations of marketing authorizations. \_Participation in EMA's Scientific Advice on Quality Aspects for Biologicals. \_Clinical assessor Vaccines allergens and specific IG
  - Country: Spain
2. Employer: ARBOR VITA CORPORATION Sunnyvale, California
  - Start date: 2000
  - End date: 2007
  - Position: Senior Scientist
  - Activities: \_See Projects, below
  - Country: United States
3. Employer: DNAX RESEARCH INSTITUTE, Palo Alto, California
  - Start date: 1992
  - End date: 2000
  - Position: Post\_doctoral fellow/Senior Research Associate
  - Activities: \_See Projects, below
  - Country: United States
4. Employer: MRC CELLULAR IMMUNOLOGY UNIT, Oxford
  - Start date: 1989
  - End date: 1992
  - Position: Post\_doctoral fellow
  - Activities: \_See Projects, below
  - Country: United Kingdom

### Education and training

1. Subject: Universidad Autónoma de Madrid,
  - Start date:
  - End date: 1983
  - Qualification: M.D.
  - Organisation:
  - Country: Spain
2. Subject: Hospital Puerta de Hierro, Madrid
  - Start date:
  - End date: 1988
  - Qualification: Specialist in Clinical Immunology
  - Organisation:
  - Country: Spain
3. Subject: Universidad Autónoma de Madrid
  - Start date:
  - End date: 1989
  - Qualification: Ph.D.
  - Organisation:
  - Country: Spain

### Additional information

#### Publications

PUBLICATIONS 1. Silva, A., Ruiz, E.F. and Somoza, C. 1985. Líneas e Híbridos T citotóxicos. In: Nuevas perspectivas en Immunología. Eds. Enjuanes, L., Fresno, M. and Larraga, V. C.S.I.C., Madrid. 2. Silva, A., Fernández\_Ruiz, E., Sanz, E. and Somoza, C. 1989. Growth requirements of T cell hybridomas obtained by the fusion between a mouse cytotoxic T cell line and the rat tumor C58NTD. Hybridoma, 8:61. 3. Somoza, C., Fernández\_Ruiz, E., Jotterand\_Bellomo, M., Sanz, E., Nabholz, M. and Silva, A. 1989. Loss of IL2 dependence in cloned IL2 dependent rat CTLx BW5147 hybridomas is not associated with segregation of a specific pair of rat chromosomes. Eur. J. Immunol. 19:1777. 4. Fernández\_Ruiz, E., Rebollo, A., Nieto, M.A., Sanz, E., Somoza, C., Ramírez, F., López\_Rivas, A. and Silva, A. 1989. Interleukin 2 protects T cell hybrids from the cytotoxic effect of glucocorticoids: Synergistic effect of Interleukin 2 and dexamethasone in the induction of high affinity Interleukin 2 receptors. J. Immunol. 143: 4146. 5. Cyster, J.G., Somoza, C., Killeen, N. and Williams, A.F. 1990. Protein sequence and gene structure for mouse leukosialin (CD43) a T lymphocyte mucine without introns in the coding sequence. Eur. J. Immunol. 20: 875. 6. Somoza, C., Fernández\_Ruiz, E., Rebollo, A., Sanz, E., Ramírez, F. and Silva, A. 1990. OX\_48 a monoclonal antibody against a 70kD rat activation antigen expressed by cells bearing the high affinity Interleukin 2 receptor. Immunology 70: 210. 7. Schockmel, G.A., Somoza, C., Davis, S.J., Williams, A.F. and Healey, D. 1992. Construction of a binding site for HIV\_1 gp120 in rat CD4. J. Exp. Med. 175: 301. 8. Classon, B.J., Brown, M.H., Garnett, D., Somoza, C., Barclay, A.N., Willis, A.C. and Williams, A.F. 1992. The hinge region of the CD8 b chain: Structure, antigenicity and utility in expression of immunoglobulin superfamily domains. Inter. Immunol. 4:215. 9. Davis, S.J., Schockmel, G.A., Somoza, C., Buck, D.W., Healey, D., Rieber, E.P., Reiter, C. and Williams, A.F. 1992. Antibody and HIV\_1 gp120 recognition of CD4 undermines the concept of mimicry between antibodies and receptors. Nature 358:76. 10. Ashford, D.A., Alafi, C.D., Gamble, V.M., Mackay, D.J.G., Rademacher, T.W., Williams, P.J., Dwek, R.A.,

Barclay, A.N., Davis, S.J., Somoza, C., Ward, H.A. and Williams, A.F.1993. Site-specific glycosylation of recombinant rat and human soluble CD4 variants expressed in Chinese hamster ovary cells. *J. Biol. Chem.* 268:3260. 11. Simon, J.H.M., Somoza, C., Schockmel, G.A., Collin, M., Davis, S.J., Williams, A.F. and James, W. S. 1993. A rat CD4 mutant containing the gp120-binding site mediates human immunodeficiency virus type 1 infection. *J. Exp. Med.* 177: 949. 12. Somoza, C., Driscoll, P.C., Cyster, J.G. and Williams, A.F.1993. Mutational analysis of the CD2/CD58 interaction: The binding site for CD58 lies in one face of the first domain of human CD2. *J. Exp. Med.* 178: 549. 13. Barclay, A.N., Birkeland, M.L., Brown, M.H., Beyers, A.D., Davis, S.J., Somoza, C. and Williams, A.F. 1993. The leukocyte antigen FactsBook. Academic Press. Harcourt Brace Jovanovich, Publishers. London. 14. Driscoll, P.C., Cyster, J.G., Somoza, C., Crawford, A.D., Howe, P., Harvey, T.H., Kieffer, B., Campbell, I.D. and Williams, A.F. 1993. Structure-function studies of CD2 by NMR and mutagenesis. *Biochemical Society Transactions* 21: 947. 15. Azuma, M., Ito, D., Yagita, H., Okumura, K., Phillips, J. H., Lanier, L.L. and Somoza, C. 1993. B70 antigen is a second ligand for CTLA-4 and CD28. *Nature* 366:76. 16. Lanier, L. L., O'Fallon, S., Somoza, C., Phillips, J.P., Linsley, P. S., Okumura, K., Ito, D. and Azuma, M. 1995. CD80 (B7) and CD86 (B70) provide similar costimulatory signals for T cell proliferation, cytokine production, and generation of CTL. *J. Immunol.* 154:97. Ma Chamorro SOMOZA DIAZ\_SARMIENTO, M.D. Ph.D. C/ Marcenado, 24 Bajo I., 28002 Madrid | 685\_634\_760 | chamosom@yahoo.com | www.linkedin.com/in/chamorro 17. Fernández\_Ruiz, E., Somoza, C., Sánchez\_Madid, F. and Lanier, L. L. 1995. CD28/CTLA4 ligands: the gene encoding CD86 (B70/B7.2) maps to the same region as CD80 (B7/B7.1) gene in human chromosome 3q13-q23. *Eur. J. Immunol.* 25:1453. 18. Somoza, C. and Lanier, L. L. 1995. T cell costimulation via CD28/CD80-CD86 and CD40/CD40 ligand. *Res. Immunol.* "61st Forum in Immunology" 146:171. 19. Shibuya, K., Robinson, D., Zonin, F., Hartley, S.B., Macatonia, S.E., Somoza, C., Hunter, C.A., Murphy, K.M., O'Garra A. 1998. IL-1 alpha and TNF-alpha are required for IL-12-induced development of Th1 cells producing high levels of IFN-gamma in BALB/c but not C57BL/6 mice. *J Immunol*, 160:1708. 20. Iwasaki H, Somoza, C, Shigematsu H, Duprez EA, Iwasaki\_Arai J, Mizuno S, Arinobu Y, Geary K, Zhang P, Dayaram T, Fenyus ML, Elf S, Chan S, Kastner P, Huettner CS, Murray R, Tenen DG, Akashi K. 2005. Distinctive and indispensable roles of PU.1 in maintenance of hematopoietic stem cells and their differentiation. *Blood*. Sep 1; 106(5):1590-600. 21. Shai A, Brake T, Somoza, C, Lambert PF. The Human Papillomavirus E6 Oncogene Deregulates the Cell Cycle and Contributes to Cervical Carcinogenesis through Two Independent Activities. *Cancer Res.* 2007 Feb 15;67(4):1626-35. SELECTED CONFERENCE PRESENTATIONS 22nd International Papillomavirus Conference, Vancouver, May 2005. Bagowski, C., Somoza, C., Belmares, M., Mahoney, S., Khanna, R., Snow, A., Chang, J. Schweizer, J. and P. Lu (2005). Role of High\_risk HPV E6 PDZ-binding Ability in Cervical Epithelial Cell Transformation. Oral presentation. 23rd International Papillomavirus Conference, Prague, 2006. C Somoza, C P Bagowski, L Peysakhovich, S Mahoney, R Khanna, C Lynch, J Silver, P S Lu, J Schweizer. High\_risk HPV\_E6 activates the JNK pathway by interacting with PDZ\_protein MgI1. Oral presentation.

## Projects

ARBOR VITA CORPORATION, Sunnyvale, CA DEVELOPMENT OF NEW THERAPIES AND DIAGNOSTIC TESTS FOR CERVICAL CANCER \_Designed a point of care diagnostic assay for cervical cancer that detects the HPV E6 oncoprotein \_Generated monoclonal antibodies against the E6 protein of over 15 oncogenic HPV types \_Identified and validated novel targets for cervical cancer \_Identified a novel kinase pathway involved in cervical cancer transformation by Human Papillomavirus (HPV) 16 E6 oncoprotein STUDY ROLE OF PDZ PROTEINS IN AUTOIMMUNE DISEASE AND CANCER. \_Uncovered cellular PDZ protein targeted by HTLV-1 leukemia virus DNAX RESEARCH INSTITUTE, Palo Alto, USA ESTABLISHMENT OF CONDITIONAL GENE TARGETING SYSTEM OF PU.1 IN MONOCYTES/MACROPHAGES \_Generated standard and conditional knock\_out mice of transcription factor PU.1 \_Studied the development of microglia in the central nervous system of PU.1 knock\_out mice \_Generated transgenic mice lines of CRE recombinase under monocyte specific promoters IDENTIFICATION AND ANALYSIS OF THE LIGAND OF T LYMPHOCYTE CO-STIMULATORY MOLECULE CD28 \_Cloned and characterized human CD86 which binds CD28 and CTLA-4 proteins and plays a major role in T lymphocyte activation \_Generated mouse CD86 targeting constructs and used homologous recombination to isolate mouse ES cells containing a disrupted CD86 allele CELLULAR IMMUNOLOGY UNIT, Oxford, UK RECREATION OF THE HIV-1 GP120 BINDING SITE IN RAT CD4 PROTEIN PERMITTING VIRAL INFECTION OF RAT CELLS STRUCTURE\_FUNCTION STUDIES OF LYMPHOCYTE IMMUNOGLOBULIN SUPERFAMILY MOLECULES \_Engineered a mutant of the rat CD4 molecule containing the gp120-binding site for HIV-1 allowing the viral infection of rat cells. \_Mutational study of human CD58 protein to determine the amino acids involved in the interaction between lymphocyte adhesion molecules CD58 and CD2 \_Isolated cDNA clones of mouse leukosialin (CD43) from phage library

## Memberships

### Other Relevant Information

US PATENTS ARBOR VITA CORPORATION Systems of diagnosing cervical cancer 8048676, 2011 Methods of diagnosing cervical cancer 7972774, 2011 Antibodies for oncogenic strains of HPV and methods of their use 7399467, 2008 Methods of diagnosing cervical cancer 7312041, 2007 NON-SCIENTIFIC EXPERIENCE 2008\_2011 Operations Manager of Social Business: TeamWorks House Cleaning Cooperative, San Jose, CA