

## **Curriculum Vitae:**

**Name:** Javier Garcia-Perez

**Date and place of birth:** 1976, Madrid. Spain

### **Present position:**

- 2009-present: Postdoctoral researcher in AIDS Immunopathogenesis Unit. National Centre of Microbiology. Instituto de Salud Carlos III. Madrid, Spain.

### **Education:**

- 2007. **PhD in molecular biology**. Thesis entitled: "Application of recombinant viruses as a tool for assessing drug susceptibility and replication capacity of human immunodeficiency virus type 1". Molecular Biology Department, Universidad Autónoma de Madrid (UAM).
- 2000. **Certified of Pedagogical Aptitude (CAP)**, specializing in Natural Sciences from the Institute of Education at UCM.
- 2000. **Molecular Biology Degree**. Universidad Autónoma de Madrid.
- 1999. **Biochemistry Degree**. Universidad Autónoma de Madrid.

### **Positions and employment:**

- At present (2013-2016): Technical and Professional Activities Senior Contract at the Immunopathology Laboratory, National Centre for Microbiology. Institute for Health Carlos III (Ministry of Health), Majadahonda, Madrid. Subject: "Study of cellular modifications induced by HIV infection and transcriptional analysis of LTNP patients. Impact protection against infection and progression to AIDS".
- 2009-2012 Technical and Professional Activities Senior Contract at the Immunopathology Laboratory, National Centre for Microbiology. Institute for Health Carlos III (Ministry of Health), Majadahonda, Madrid. Subject: "Study of the cellular changes induced by human retroviruses: HIV-1, HTLV-1. Implications in the pathogenesis of AIDS and lymphoma".
- 2008 Post-doctoral research fellow (ANRS) at the "Unité de Pathogénie Virale Moléculaire" Laboratory. Institut Pasteur (Paris). Subject: "Evolution genotypique et phenotypique du tropisme et recherche des mécanismes d'adaptation virale chez les sujets traités par un antagoniste de CCR5".
- 2000-2007 Pre-doctoral research fellow at the Immunopathology Laboratory, National Centre for Microbiology. Institute for Health Carlos III (Ministry of Health), Majadahonda, Madrid. Subject: "Generation of new tests of phenotypic resistance to antiretroviral drugs and replicative capacity in HIV-infected patients".
- 1999-2000 Student research fellow at the Parvovirus Laboratory, Centre of Molecular Biology "Severo Ochoa" (UAM, CSIC) Cantoblanco, Madrid. Subject: "Protein Motives and Interactions Regulating the Nuclear Transport and Assembly of the Parvovirus Minute Virus of Mice Capsid Proteins".

### **Teaching activity:**

- Professor of Virology and immunology at the European University of Madrid.
- Invited Professor for Master of Infectious Diseases. Instituto Carlos III- University of Alcalá 2014-current

### **Areas of research interest:**

- Evolution of the envelope protein of HIV and interaction with CCR5 and CXCR4 receptors
- Development of new systems for the screening of antiretroviral compounds and drug resistance testing
- HIV-1 pathogenesis. Latency and reactivation, viral entry, virulence factors

### **Recent Research support:**

- Spanish Ministry of Health (Project No: EC11-175): Mecanismos de escape de los virus con tropismo R5 a la inhibición por quimiocinas y los nuevos antagonistas de CCR5.

DURATION: 1 YEAR. TOTAL FINANCING GRANTED: 51.685 €. Principal investigator: Javier García Pérez.

**Ongoing Scientific collaborations:**

- Dr Bernard Lagane. Unité de Pathogénie Virale Moléculaire. Pasteur Institute, Paris, France.
- Dr Carolina Herrera Infectious Diseases Section of the Division of Infectious Diseases, Department of Medicine, Imperial College of London. St. Mary's campus. London, UK.

**Relationship with foreign institutions:**

- Several stays (2009-2014) at the "Unité de Pathogénie Virale Moléculaire" Laboratory. Institut Pasteur (Paris), under the tutelage of Dr. Bernard Lagane.

**Areas of research interest:**

- Restriction factors
- Dendritic cells-HIV-1 interaction. Early phases of infection
- HIV-1 pathogenesis. Latency and reactivation, viral entry, virulence factors
- Regulation of CXCR4 expression and CXCL12 chemokine and their role in HIV-1 infection

**Publications:**

- **Screening of South American plants against human immunodeficiency virus: preliminary fractionation of aqueous extract from *Baccharis trinervis*.** Sanchez Palomino S, Abad MJ, Bedoya LM, Garcia J, Gonzales E, Chiriboga X, Bermejo P, Alcamí J. Biol Pharm Bull (2002) 25(9):1147-1150.
- **Complementary roles of multiple nuclear targeting signals in the capsid proteins of the parvovirus minute virus of mice during assembly and onset of infection.** Lombardo E, Ramirez JC, Garcia J, Almendral JM. J Virol (2002) 76(14):7049-7059.
- **G protein-dependent CCR5 signaling is not required for efficient infection of primary T lymphocytes and macrophages by R5 human immunodeficiency virus type 1 isolates.** Amara A, Vidy A, Boulla G, Mollier K, Garcia-Perez J, Alcamí J, Blanpain C, Parmentier M, Virelizier JL, Charneau P, Arenzana-Seisdedos F. J Virol (2003) 77(4):2550-2558.
- **Prostratin induces HIV activation and downregulates HIV receptors in peripheral blood lymphocytes.** Rullas J, Bermejo M, García-Pérez J, Beltán M, González N, Hezareh M, Brown SJ, Alcamí J. Antivir Ther (2004) 9(4):545-554.
- **A new strategy based on recombinant viruses as a tool for assessing drug susceptibility of human immunodeficiency virus type 1.** Garcia-Perez J, Sanchez-Palomino S, Perez-Olmeda M, Fernandez B, Alcamí J. J Med Virol (2007) 79(2):127-137.
- **A New Strategy Based on Recombinant Viruses for Assessing the Replication Capacity of HIV-1.** J. Garcia-Perez, M. Perez-Olmeda, S. Sanchez-Palomino, P. Perez-Romero, J. Alcamí. HIV Med (2008) 9(3):160-71.

- **In vitro analysis of synergism and antagonism of different nucleoside/nucleotide analogue combinations on the inhibition of human immunodeficiency virus type 1 replication.** Perez-Olmeda M, Garcia-Perez J, Mateos E, Spijkers S, Ayerbe MC, Carcas A, Alcamí J.  
J Med Virol. 2009 81(2):211-6.
- **A sensitive phenotypic assay for the determination of human immunodeficiency virus type 1 tropism.** González N, Pérez-Olmeda M, Mateos E, Cascajero A, Alvarez A, Spijkers S, García-Pérez J, Sánchez-Palomino S, Ruiz-Mateos E, Leal M, Alcamí J.  
J Antimicrob Chemother. 2010; 5(12):2493-501.
- **New insights into the mechanisms whereby low molecular weight CCR5 ligands inhibit HIV-1 infection.** Garcia-Perez J, Rueda P, Staropoli I, Kellenberger E, Alcamí J, Arenzana-Seisdedos F, Lagane B.  
J Biol Chem. 2011. 286(7):4978-90.
- **Allosteric model of maraviroc binding to CC chemokine receptor 5 (CCR5).** Garcia-Perez J, Rueda P, Alcamí J, Rognan D, Arenzana-Seisdedos F, Lagane B, Kellenberger E.  
J Biol Chem. 2011. 286(38):33409-21.
- **Generation and Characterization of a Defective HIV-1 Virus as an Immunogen for a Therapeutic Vaccine.** Alvarez-Fernández C, Crespo Guardo A, García-Pérez J, García F, Blanco J, Escribà-García L, Gatell JM, Alcamí J, Plana M, Sánchez-Palomino S.  
PLoS One. 2012. 7(11):e48848.
- **Use of RT-defective HIV virions: new tool to evaluate specific response in chronic asymptomatic HIV-infected individuals.** Guardo AC, Alvarez-Fernández C, Arberas H, García-Pérez J, García F, Bargalló ME, Maleno MJ, Gatell JM, Mothe B, Alcamí J, Sánchez-Palomino S, Plana M.  
PLoS One. 2013;8(3):e58927.
- **Modeling the allosteric modulation of CCR5 function by Maraviroc.** Lagane B, Garcia-Perez J, Kellenberger E. Drug Discov Today Technol. 2013;10(2):e297-305.

#### Patents:

- **“Application of recombinant viruses in tests of phenotypic resistance to antiretroviral drugs, neutralizing antibody detection and screening of compounds with antiviral activity”.** Alcamí J, Sánchez-Palomino S, García J, González N.  
Application number: 200.400.116. Spain.  
Patent submitted: 10-05-2004.

#### Participation in scientific projects:

- **Project:** Evolution genotypique et phenotypique du tropisme et recherche des mécanismes d'adaptation virale chez les sujets traités par un antagoniste de CCR5.  
**Financing Entity:** ANRS  
**Duration:** 2007-2010  
**Principal Investigator:** José Alcamí
- **Number of project:** 36630 / 07

**Project:** Evolución genotípica y fenotípica del VIH en pacientes tratados con antagonistas de CCR5.

**Financing Entity:** Fundación FIPSE

**Duration:** 2008-2010

**Principal Investigator:** José Alcamí

- **Number of project:** 037611 Research topic addressed: LSH-2005-2.3.0-2  
**Project:** "Red Europea de Excelencia en VIH/SIDA. Desarrollo de nuevas vacunas y viricidas frente al VIH. (Red EUROPRISE del VI Programa Marco de la UE)"  
**Financing Entity:** Unión Europea  
**Duration:** 2006-2010  
**Principal Investigator:** José Alcamí
- **Number of project:** S2006/SAL-0185  
**Project:** Interacción virus-huesped: interacción de nuevas dianas de actuación antiviral (VIRHOST)  
<http://www.virhost.es>  
**Financing Entity:** C.A.M.  
**Duration:** 2007-2010  
**Principal Investigator:** Juan Ortin (Coordinador), Luis Enjuanes, Jose Maria Almendral, Jose Antonio Melero, Antonio Alcamí, Jose Alcamí
- **Number of project:** PI080752  
**Project:** Estudio de las modificaciones celulares inducidas por retrovirus humanos: Virus de la Inmunodeficiencia Humana (VIH-1), Virus de la Leucemia-Linfoma T del adulto (HTLV-1). Implicaciones en la patología del Sida y Linfoma.  
**Financing Entity:** Fondo de Investigación Sanitaria (FIS)  
**Duration:** 2009-2012  
**Principal Investigator:** José Alcamí
- **Number of project:** RD06/0006/0037  
**Project:** "Red de investigación en SIDA" <http://www.retic-ris.net>  
**Financing Entity:** MINISTERIO DE SANIDAD  
**Duration:** 2007-2012  
**Principal Investigator:** José María Gatell, José Alcamí
- **Number of project:** EC11-175  
**Project:** Mecanismos de escape de los virus con tropismo R5 a la inhibición por quimiocinas y los nuevos antagonistas de CCR5.  
**Financing Entity:** Ministerio de Sanidad, Servicios Sociales e Igualdad.  
**Duration:** 2012  
**Principal Investigator:** Javier García Pérez