

**Curriculum Vitae:**

**Name:** Manuela Beltrán Vicente

**Date and place of birth:** 1969, Madrid. Spain

**Present position:**

- Present. Staff for screening platform and mechanism of action of new compounds with activity against human immunodeficiency virus (AIDS Immunopathology Unit. National Centre of Microbiology. Instituto de Salud Carlos III). Sub technical support staff. Infrastructure mode (MINECO). Madrid (Spain).
- 2012-2013. superior technical skills and professional activities. Project: "Escape mechanism of R5-tropic virus to inhibition by chemokines and CCR5 antagonists new" (AIDS Immunopathology Unit. National Centre of Microbiology. Instituto de Salud Carlos III). Madrid (Spain).

**Tertiary Education:**

- Vocational II. Health Rama. Technical specialist in clinical analysis. Madrid 1996 (Spain).

**Positions and employment:**

- 1998. Immunological analysis technician. Department of microbiology (Immunology Unit). Universidad Complutense. Madrid (Spain).
- 1999. Technical specialist in automated DNA sequencing. Center research assistance. DNA sequencing unit. Univesidad Complutense. Madrid (Spain).
- 2000. Technical specialist HIV. Project: "Development of new systems for determining phenotypic resistance to antiretroviral". (AIDS Immunopathology Unit. National Centre of Microbiology. Instituto de Salud Carlos III). Madrid (Spain).
- 2001-2004. Technical specialist HIV. Project: "Study of the mechanisms of proviral latency in lymphocytes infected with HIV-1". (AIDS Immunopathology Unit. National Centre of Microbiology. Instituto de Salud Carlos III). Madrid (Spain).
- 2004-2005. Technical specialist HIV. Project: "Development of a technology platform for screening and characterization of compounds with antiviral activity". (AIDS Immunopathology Unit. National Centre of Microbiology. Instituto de Salud Carlos III). Madrid (Spain).
- 2005-2010. Associate scientist. Project of the Global Alliance TB (Bill and Melinda Gates Foundation): "Pleuromutilines. ICL inhibitors. InhA inhibitors. Trials of antimicrobials against Mycobacterium tuberculosis processes". Staff of GlaxoSmithKline. Diseases of the developing world. Tres cantos (Spain).

**Teaching activity:**

- 2004. Training program for laboratory technicians. Foundation for international health cooperation Carlos III (CSAI). Instituto de Salud Carlos III. Madrid, Spain.

**Areas of research interest:**

- Development of new systems for the screening of antiretroviral compounds and drug resistance testing.

**Recent Research support:**

- Mechanisms of proviral latency in HIV-infected lymphocytes" Ministry of Research. 2000-2002.
- Development of a technological platform for screening and characterization of natural products with antiviral activity" Instituto de Salud Carlos III. Ministry of Research 2004-2006.
- Development of a new class of microbicides. AIM-HIV project, granted by the EC FP7.

## Publications:

1. Alcamí J, Rullas J, Bermejo M, **Beltrán M** y Sánchez-Palomino S. "Inmunopatología del SIDA". *Medicina Integral*. 2001 May; 3(10): 428-442.
2. Alcamí J, Rullas J, Bermejo M, Alonso JM, García J, González N, **Beltrán M** y Sánchez-Palomino S. "Inmunopatología del SIDA". *Guía práctica del SIDA: clínica, diagnóstico y tratamiento*. 7th ed. Chapter 2: 19-46 (2002).
3. Rullas J, Bermejo M, García-Pérez J, **Beltrán M**, Brown S and Alcamí J. "Prostratin induces HIV reactivation and downregulates HIV receptors in PBMCs" *Antiviral Therapy*. 2004 Aug; 9(4): 545-54.
4. Bedoya LM, **Beltrán M**, Sancho R, Olmedo DA, Sánchez-Palomino S, del Olmo E, López-Pérez JL, Muñoz E, San Feliciano A, Alcamí J. "4-Phenylcoumarins as HIV transcription inhibitors". *Bioorganic and Medicinal Chemistry letters*. 2005 Oct 15, 15(20): 4447-50.
5. Bedoya LM, del Olmo E, Sancho R, Barboza B, **Beltrán M**, García Cadenas AE, Sánchez-Palomino S, López-Pérez JL, Muñoz E, San Feliciano A, Alcamí J. "Anti-HIV activity of stilbene-related heterocyclic compounds". *Bioorganic and Medicinal Chemistry letters*. 2006 Aug 1; 16(15):4075-9.
6. Bedoya LM, Álvarez A, Bermejo M, González N, **Beltrán M**, Cruz SM, Gaitán I, del Olmo E, Escarcena R, García PA, Cáceres A, San Feliciano A, Alcamí J. "Guatemalan plants extracts as virucides against HIV-1 infection". *Phytomedicine*. 2008 Jun; 15(6-7): 520-4.
7. Joaquín Rullas, Juan Ignacio García, **Manuela Beltrán**, Pere Joan Cardona, Neus Cáceres; José Francisco García-Bustos and Iñigo Angulo-Barturen. "Fast standardized therapeutic-efficacy assay for drug discovery against tuberculosis". *Antimicrobial agents and chemotherapy*. 2010 May; Vol 54, nº5; p 2262-2264.
8. González-Bulnes L, Ibáñez I, Bedoya LM, **Beltrán M**, Catalán S, Alcamí J, Fustero S, Gallego J. "Structure-Based Design of an RNA-Binding *p*-Terphenylene Scaffold that Inhibits HIV-1 Rev Protein Function". *Angewandte chemie (international edition)* Volume 52, Issue 50, pages 13405–13409, December 9, 2013.

## Others merits. Congress:

- 2001. First Conference on HIV Pathogenesis and Treatment. "Interleukin-2 is a poor inducer of HIV transcription in peripheral blood lymphocytes". Pedraza M, Rullas J, Martín-Serrano J, **Beltrán M**, Alcamí J. Buenos Aires (Argentina).
- 2001. VII National Congress of Virology (Spanish Society of Virology). "Molecular analysis and cellular mechanisms of resistance to antiretroviral". García-Pérez J, **Beltrán M**, Alcamí J, Sánchez-Palomino S. Valencia(Spain).
- 2002. XIV Internacional AIDS Conference. Barcelona (Spain).
- "Differences in inhibitory concentrations (IC50 and IC90) of reverse transcriptase inhibitors between tumour cell lines and normal lymphocytes". J. García-Pérez, S, Sánchez-Palomino, **M. Beltrán**, J. Alcamí.

- "Prostratin induces HIV reactivation and inhibits CCR5 and CXCR4 expression in PBMCs" J. Rullas, M. Bermejo, **M. Beltrán**, J. Alcamí.
- "Interleukin-2 is a poor inducer of HIV reactivation, but enhances viral persistence in lymphocytes". J. Rullas, MA. Pedraza, J. Martín-Serrano, **M. Beltrán**, J. Alcamí.
- "Characterization of a CD4+ T-cell clone expressing both CXCR4 and CCR5 coreceptors". S. Sánchez-Palomino, M. Bermejo, J. García-Pérez, **M. Beltrán**, A. Valenzuela, F. Arenzana, J. Alcamí.
- 2005: Keystone Symposia. HIV pathogenesis. HIV vaccines: current challenges and future prospects "Prostratin induces HIV reactivation and downregulates HIV receptors in PBMCs" J Rullas, M Bermejo, J García-Pérez, **M Beltrán**, SJ Brown, J Alcamí: Keystone. Colorado (USA).
- 2009: Keystone Symposia. Tuberculosis: biology, pathology and therapy. "A fase therapeutic efficacy assay wich discriminates cidal and static antitubercular compunds againts *Mycobacterium tuberculosis* growing exponentially in the lungs of mice". Joaquín Rullas, Juan I. García, **Manuela Beltrán**, Iñigo Angulo-Barturen Keystone. Colorado (USA).
- 2009. DDW DPU Science forum. GlaxoSmithKline. Drug Performance Units: Diseases of Developing Word Drug Discovery Center (DDW). Tres Cantos (Spain) "Improving the robustness of in vivo experiments in murine models of tuberculosis" **Manuela Beltrán**, Juan I. García, Iñigo Angulo, Joaquín Rullas.
- 2013. 7Th IAS conference on HIV pathogenesis treatment and prevention. Kuala Lumpur (Malaysia). "Antiviral activity of 5-Hydroxytyrosol, a microbicidal candidate". L.M. Bedoya, **M. Beltrán**, D. Auñon, E. Gomez-Acebo, J. Alcamí.
- 2013. AIDS vaccine. Barcelona (Spain). "Anti-HIV activity of 5-Hydroxytyrosol, a microbicidal candidate". Bedoya L.M, Auñon D, **Beltrán M.**, Gomez-Acebo E., Alcamí J.

#### Hobbies:

- Trekking:
  - o 1999. Inca trail to Machu Picchu (Peru).
  - o 2000. Quebrada San Martín and Nevado Pastoruri (5240m) (Peru).
  - o 2002. Camino de Santiago (Spain).
  - o 2004. High way west. (Scotland).
  - o 2007. Toubkal (4167m). (Morocco).
  - o 2008. Taillón (3144m). (Spain).
  - o Others mountains: Peñalara (2428m. Madrid. Spain), Moncayo (2314m. Zaragoza. Spain), Gorbea (1492m. Bizcaia. Spain), Aitzkorri (1528m. Guipuzcoa. Spain), Mesa de los Tres Reyes (2444m. Navarra. Spain).
- Enviroment:
  - o 2006. Operation and maintenance of marine mammals. Zoológico. Madrid (Spain).
  - o 2006. Management and conservation of exotic birds (parrots). Zoológico. Madrid (Spain).
  - o 2008. Management and conservation of birds. Zoológico. Madrid (Spain).
  - o 2009. Introduction to bird ringing. SEO/Birflife. Madrid (Spain).
  - o 2010. Introduction of mycology. SEO/Birdlife. Madrid (Spain).
- Present: constructions, finger paint, children's stories, dolls.