

Ana Luisa Munoz Ramirez

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Date of Birth: 28 January 1978 (34 years old)

Nationality: Spanish and Colombian

Key skills/Profile

* An enthusiastic and thorough professional, with a wide experience and interest in research fields from working in research labs, to Molecular and Cellular Biology and Virology, to investigations into regenerative medicine strategies using different Stem Cells types as well as platelet concentrates. A good team worker with a healthy sense of humour who works well under pressure.

Education

2003-2008 **PhD. Microbiology** Universidad Autónoma de Madrid, Spain.

* Conducted research developing vaccines based on Aujeszky's virus, modifying Bacterial Artificial Chromosomes, and expressing proteins by plasmids and bacteria.

2001-2003 **Bsc. Biology** Universidad Complutense de Madrid, Spain

* Homologation

1996-2001 **Bsc. Bacteriology** Universidad Católica de Manizales, Colombia

* Conducted experiments into fungi present in orange peel with a biotechnology application

Training

* Work Shop "Putting innovative doctoral training into practice. 20 horas. Sabana University (Colombia) – Victoria University (Australia), 2016

* Work Shop "Teaching University", 32 hours face-to-face, 24 virtual. Antonio Nariño University, Bogotá, 2015

* International Molecular and virology diagnostic Workshop for PRRS virus, ICA Bogotá, Colombia, 2012

* Microinjection into adherent cells – at EMBL, Eppendorf, Heidelberg, Germany (2010).

* Operator in Radiation Facilities, applied to laboratories with unsealed sources (at Instituto de Investigaciones Biomédicas, Madrid Spain, 2006)

* Trained in hematological and electrophoretic techniques applied to human blood tissue (at Universidad Complutense, Madrid Spain 2001).

Career history

Cellular Therapy Laboratory Director, Hemolife Fundation, Bogotá, Colombia (Currently)

- * Conducting research into Induced Pluripotent Stem Cells, Mesenchymal Stem Cells, Hematopoietic Stem Cells, and their application in disease therapeutic
- * Conducting research into platelet concentrates standardization and their use in different clinical application

Assistant Professor and Researcher in Antonio Nariño University, Bogotá, Colombia (Currently)

- * Conducting research into regenerative medicine, about mesenchymal stem cells and platelet concentrates obtaining, characterization and differentiation
- * Conducting research into no conventional antiviral drugs
- * Teaching Molecular Biology and Microbiology to medical students

Bacteriologist in ICA, Veterinary National Lab, Bogotá, Colombia (September 2012-Currently)

- * Improving ELISA methods for FMDV diagnostic
- * Diagnostic in Exotic Viral Diseases department, in a BSL3 facility.

Postdoctoral Researcher in Cibera Foundation Regeneration and Development lab, Balearic Islands, Spain (2010 – 2011)

- * Conducted research into Induced Pluripotent Stem Cells obtaining, culture and differentiation.
- * Developed Fluorescence *in Situ* Hybridization from chromosomes
- * Carried out investigations into Human Artificial Chromosome characterization and isolation and gene therapy strategies.

Researcher in Exotic Viral diseases department. Central Laboratory of Veterinary Medicine (Madrid, Spain) (2009 – 2010)

- * Optimized techniques of virus inactivation.
- * Improved Orbivirus neutralization test
- * Conducted research into virus isolation from clinical samples and evaluated resulting data, in a BSL3 facility.

Researcher in Microbiology department, Universidad Autónoma de Madrid, Spain (2003 – 2009)

- * Developed different Aujeszky recombinant viruses and evaluated their activity as a vaccine.
- * Analysed function of packing sequences from Aujeszky by Bacterial Artificial Chromosome.
- * Protein expression into plasmids, bacteria and amplicons.

Junior Researcher in Microbiology, Universidad del Valle, Colombia (2000 – 2001)

* Conducted research into *Plasmodium falciparum* culture

Publications

L. Lerma, **A.L. Muñoz**, R García Utrilla, B Sainz, F. Lim, E. Tabarés, S. Gómez-Sebastián. **Partial complementation between the immediate early proteins ICP4 of herpes simplex virus type 1 and IE180 of Pseudorabiesvirus**. Virus Research 279 (2020) 197896

Muñoz AL, Merchán WH, Resende AL, Moraes ÂM, Gómez LA. **Biostimulation of venous chronic ulcers with platelet-rich plasma gel and biocompatible membranes of chitosan and alginate: A pilot study**. Wound Medicine 26 (2019) 100161

Merchán W, Chasoy M, Alfonso C, Gómez L, **Muñoz AL**. **Platelet-Rich Plasma, a powerful tool in dermatology**. Journal of Tissue Engineering and Regenerative Medicine 13 (2019) 892-901

Pava J, Sabogal M, Mora D, Ortiz Y, Hinojosa J, Gutierrez D, **Muñoz AL**. **New Trends in the Treatment of Grade II Furcation Defects by Using Second Generation Platelet Concentrates**. Journal of Genetic Engineering and Biotechnology Research 1 (2018) 1-4

Gutiérrez D, Hinojosa J, Restrepo A, **Muñoz AL**, Velarde N, Bastidas F. **Análisis estructural de la fibrina rica en plaquetas y sus aplicaciones en odontología regenerativa**. Universitas Odontológica 37 (2018), on line.

Gómez L, Castro S, Cruz W, **Muñoz AL**. **Tratamiento de úlceras crónicas en pacientes diabéticos con plasma rico en factores de crecimiento**. Piel 3 2 (20 1 7)

Muñoz AL, Galvez V, Camarasa MV. **Stem cell Therapies**. Recent patents on regenerative medicine 5 (2016) 145-151

Galvez V, Camarasa MV, **Muñoz AL**. **Therapeutic Nucleic Acids**. Recent patents on regenerative medicine 5 (2016) 111-124

Lerma L, **Muñoz AL**, Wagner S, Dinu M, Martín B, Tabarés E. **Construction of recombinant pseudorabies viruses by using PRV BACs deficient in IE180 or pac sequences: Application of vBAC90D recombinant virus to production of PRV amplicons**. Virus Res 213 (2016) 274-82

A.L. Muñoz, I. Gadea, L. Lerma, L. Varela, M. Torres, B. Martín, A. García-Culebras, F. Lim, E. Tabares. **Construction and Properties of a Recombinant Pseudorabies Virus with tetracycline-regulated control of Immediate-Early Gene Expression**. Journal of Virological Methods 171 (2011) 253-259

A. L. Muñoz, M. Torres, B. Martín, L. Lerma and E. Tabarés. **Regulation of Pseudorabies virus gG glycoprotein gene promoter independently of Pseudorabies immediate early IE180 protein**. Archives of Virology 155 (2010) 515-23.

A.L. Muñoz, Alcamí A. **Glycoprotein G from Pseudorabies virus binds to chemokines with high affinity and inhibits their function**. Journal of General Virology 91(2010) 23-31.

A.L Muñoz, Prieto C. Tabarés E. **A comparison of enhanced green fluorescent protein expression induced by immediate-early cytomegalovirus (IE-CMV) and gG pseudorabies virus (gG-PRV) promoters, using pseudorabies virus amplicons as vectors**. Journal of virological Methods 136 (2006) 257-260.