



## Lourdes Carolina Figueroa-Gordon

### CURRICULUM VITAE

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- **Date of Birth:** 27 of June of 1978
- **Place of Birth:** Caracas, Venezuela
- **Citizenship:** Venezuelan
- **Work Address:** Laboratorio de Fisiologia Celular, Centro de Biofisica y Bioquimica (CBB), Instituto Venezolano de Investigaciones Cientificas (IVIC). Km 11 de la Carretera Panamericana. Altos de Pipe.Venezuela
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#### EDUCATION

- Present**      **PhD in Biophysics and Physiology**, Venezuelan Institute for Scientific Research (IVIC)
- 2002**          **Licentiate in Biology**, Cell Biology (Mayor), Central University of Venezuela

#### RESEARCH POSITIONS

- 2003-Present**      **Graduate Student**, Laboratory of Cellular Physiology, Venezuelan Institute for Scientific Research (IVIC)  
**Advisor:** Dr. Carlo Caputo  
**Thesis:** Changes in regulatory mechanisms of calcium handling during skeletal muscle development  
**Research Techniques:** enzymatic isolation of FDB muscles from neonatal and adult mice, FDB primary cultures, cardiac-skeletal primary co-cultures, fluorescence recordings (Fluo-4, Fura-2, Di8Anneps), inmunocytochemistry, laser-scanning confocal microscopy, whole-cell patch clamp
- 06-10/2005**      **Student Research Fellow**, Laboratory of Molecular and Cellular Pathology & Laboratory of Cell Therapy, Venezuelan Institute for Scientific Research (IVIC)  
**Advisor:** Dr. Jose Cardier  
**Project:** Identification of progenitors cells in adult tissues from cardiac and skeletal muscles  
**Research Techniques:** primary cell cultures from skeletal and cardiac muscle, flow cytometry and inmunocytochemistry (myogenic, hematopoietic and endothelial progenitor related surface antigens)

- 07-11/2004**      **Student Research Fellow**, Laboratory of Muscle Biophysics, Venezuelan Institute for Scientific Research (IVIC)  
**Advisor:** Dr. Adom Gonzalez  
**Project:** Ca<sup>2+</sup> store refilling determinates slow inhibition of store operated calcium entry in mammalian skeletal muscle  
**Research Techniques:** intracellular calcium measurements (Fura-2) and intracellular calcium depletion protocols
- 07-09/2002**      **International Visiting Scholar**, Department of Physiology, TexasTech University Health Sciences Center, U.S.A  
**Advisor:** Dr. Narine Sarvazyan  
**Project:** Localized Injury in Cardiomyocyte Network  
**Research techniques:** Laser-scanning confocal microscopy for monitoring calcium dynamics; isolation and culturing of neonatal rat cardiac myocytes and localized injury approach
- 2000-2002**      **Licentiate in Biology**, Cell Biology (Mayor), Central University of Venezuela  
**Date of Graduation:** December 2002  
**Advisor:** Dr. Marcos Alvarez  
**Thesis:** Effect of Chloroquine on Chick Embryo Cardiac Tissue  
**Research Techniques:** Primary culture of embryonic heart tissue (hanging drop technique), electronic microscopy (including freeze-fracture), light microscopy (phase contrast), histochemistry, and western blot

## INTERNATIONAL COURSES

- International Workshop on Membrane Transport in Health and Disease. (2006). Figueroa L. Calcium Transients in Muscle Fibres and Myotubes during Postnatal Development. Poster. Margarita Island-Venezuela. The Physiological Society and Centro Latinoamericano de Ciencias Biologicas (CLAB/UNESCO)
- Standard English Program. Village English School. Mississauga-Canada. Aug-Sep 2000
- 6-Week Intensive English. Aspect International Language School. Toronto-Canada. Aug-Sep 1999 and 1998

## AWARDS & HONORS

- Scholarship from Venezuelan Institute for Scientific Research (IVIC) Nowadays
- Excellence Scholarship from Venezuelan Institute for Scientific Research (IVIC) 2004-2007
- International Travel Grant 2007 from Biophysical Society
- Orden "Jose Felix Ribas" in its third class. 2005. República Bolivariana de Venezuela.
- Scholarship O.B.E from School of Medicine "Luis Razetti", Central University of Venezuela. 1999-2002

## MEMBERSHIPS

- Biophysical Society as Student Member 2007-nowdays

## PUBLICATIONS

### FULL PAPERS

1.- ÁLVAREZ, M.; FIGUEROA, LC.; LEÓN, I. & RODRÍGUEZ, M. (2004). Cardiotoxicidad de la Cloroquina y Protección del Rojo de Rutenio en el Corazón de Embrión de Pollo. *Inf Med.* 6(4) 196-205.

2.- CALDERÓN-VÉLEZ, JC.; FIGUEROA-GORDON, LC. (2008). El acoplamiento excitación-contracción: preguntas por responder a pesar de 50 años de estudio. *Biomedica*. Submitted

### ABSTRACTS

1. Figueroa, L.; Bolaños P.; Guillen A.; Caputo C. (2007). Calcium Signalling during development of muscle fibers and primary culture myotubes. *Biophys J January 2007, 311a*. 51<sup>st</sup> Annual Meeting of Biophysical Society. Baltimore-USA.

2. Figueroa, L.; Bolaños P.; Guillen A.; Caputo C. (2006). Effect of extracellular calcium on calcium transients of skeletal muscle fibers and myotubes during development. *Acta Científica Venezolana 57 (Sup.1):19*. LVI Convención Anual de la Asociación Venezolana para el Avance de la Ciencia (AsoVAC). Cumana-Venezuela.

3.- Figueroa, L.; Porras, N.; Rodríguez, M.; Strauss, M. & Álvarez, M. (2002). Lysosomal activity and Hsp70 expression in embryonic cardiac tissue treated by chloroquine. *Acta Científica Venezolana 53 (Sup.1):102*. LII Convención Anual de la Asociación Venezolana para el Avance de la Ciencia (AsoVAC). Barquisimeto-Venezuela.

4.- Álvarez, M.; Figueroa, L.; León, I. & Rodríguez, M. (2001). Effect of ruthenium red on embryonic cardiac tissue treated with chloroquine. *Acta Científica Venezolana 52 (Sup.3):258*. LI Convención Anual de la Asociación Venezolana para el Avance de la Ciencia (AsoVAC). San Cristóbal-Venezuela.

5.- Figueroa, L.; García, R.; Rodríguez, P; Rodríguez, M. & Álvarez, M. (2001). *Effects of Ruthenium Red on Nuclear Structures in Embryonic Heart Tissue treated with Chloroquine*. *Acta Microscopica Volume Octubre 2001: 475-476*. VI Interamerican Congress on Electron Microscopy. Veracruz-Mexico.