



# GERMÁN LUQUE CABALLERO

## RESEARCHER

### ④ SUPPLY LECTURER

#### University of Malaga

Faculty of Sciences

Department of Applied Physics I

[germanluque@uma.es](mailto:germanluque@uma.es)

### 🎓 EDUCATION AND TRAINING

**Degree in Chemistry.** University of Málaga. 2003 - 2008

**Collaboration grant** at the Department of Physical Chemistry.

**Internship:** Electronic Components S.A. (Málaga) Film capacitors.

### 🌀 PHYSICAL CHEMISTRY OF BIOINTERFACES

*Lipid-based vectors for gene therapy*

#### Research group:

Physics of Fluids and Biocolloids

#### Contact person:

Dr. Alberto Martín-Molina  
[almartin@ugr.es](mailto:almartin@ugr.es)

#### Department of Applied Physics

University of Granada  
2010 - 2015

**Master** of Science and Technology of Colloids and Interfaces

**PhD** in Physics and Space Sciences. Thesis: "*Cation-Mediated Interaction between DNA and Anionic Lipid Surfaces: an Experimental and Simulation Study*".

<http://hdl.handle.net/10481/34482>

**Publications:** 5 articles in indexed journals (92 citations)

<https://pubmed.ncbi.nlm.nih.gov/?term=Luque-Caballero%2C+G>

**Secondment:** Max Planck Institute for Colloids and Interfaces (Potsdam, Germany)

**Management** of one-year project: *Biophysics of Phosphatidic Acid*.

**Technical skills:** Preparation of liposomes, DNA fragmentation, agarose gel electrophoresis, dynamic light scattering, electrophoretic mobility, fluorescence spectroscopy, Langmuir balance, IRRA spectroscopy, surface potential, preparation of supported monolayers, atomic force microscopy, Monte Carlo simulations.

### 📈 DRUG SCREENING

*Angiogenesis and cancer*

#### Research group:

Cellular Proliferation

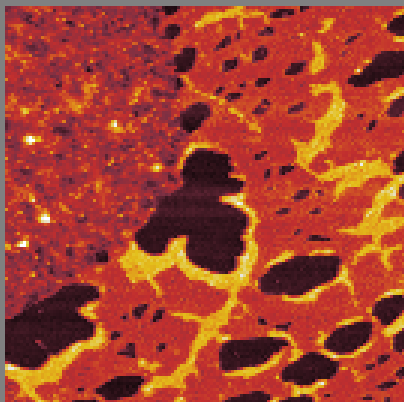
#### Contact person:

Dr. Miguel Ángel Medina-Torres  
[medina@uma.es](mailto:medina@uma.es)

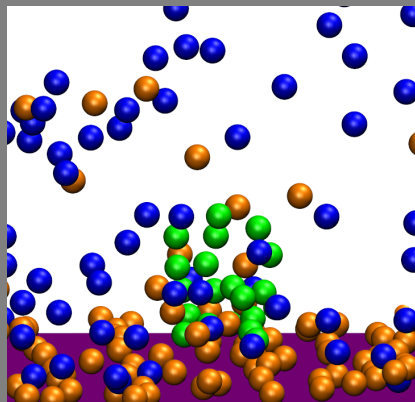
**Master** of Cellular and Molecular Biology. Thesis: *In-vitro Evaluation of Wogonin as a Bioactive Compound for the Treatment of Cancer*.

**Technical skills:** Cell culture, cell viability assay (MTT), wound-healing assay, tube-formation assay, apoptosis assay, fluorescence microscopy, P-glycoprotein inhibition assay, flow cytometry.

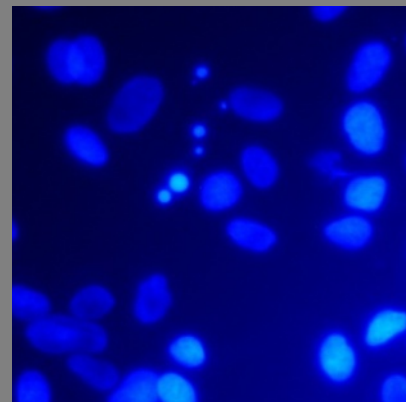
**Department of Molecular Biology and Biochemistry.** University of Málaga. 2009 - 2010



AFM image of lipid-DNA



Monte Carlo simulations



Apoptosis assay