

Curriculum Vitae

Personal data

Full name Elisa Regina Figueiras Julião Inácio de Campos

Birth date and place 23-08-1975, Seia, Portugal

Nationality Portuguese

Institutional data

Address ITQB-UNL

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Education

January 2007 M.Sc. in Biochemical Engineering by the University of Coimbra, Portugal, under the supervision of Prof. Maria Helena Gil

Title of the thesis *Preparação e caracterização de sistemas de libertação controlada para aplicação oftalmológica*

June 1998 B.Sc. in Biochemistry by the University of Coimbra, Portugal

Area of scientific activity

Nanobiotechnology

Participation in research projects

As team member:

- September 2012 - February 2013

Project: SENTINEL: Chemical and Biological Single Molecule Detection Roaming Robot

Financing Institution: Ministry of National Defence (BC-PT/DE-01/2010)

Project Leader: Yann Astier (ITQB-UNL)

- March 2010 - February 2013

Project: Hybrid electro-optical microfluidic device for single cell analysis

Participants: Institute for Systems and Computer Engineering of Porto (INESC Porto/FE/UP), Faculty of Science and Technology of Universidade Nova de Lisboa (FCT/UNL)

Financing Institution: Fundação para a Ciência e Tecnologia, FCT (PTDC/SAU-BEB/102247/2008)

Project Leader: Abel Oliva (ITQB-UNL)

- April 2010 - August 2012

Project: Nanopore based single-molecule ionic current spectroscopy for nanoparticle based catalysis

Financing Institution: FCT (PTDC/QUI-QUI/099599/2008)

Project Leader: Yann Astier (ITQB-UNL)

- June 2007 - June 2008

Project: CellPROM: Cell Programming by nanoscaled devices

Financing Institution: European Union (NMP4-CT-2004-50039)

- February 2006 - January 2007

Project: Optimisation and rapid fabrication of engineering scaffolds for bone ingrowth

Participants: University of Évora (UE), Polytechnic Institute of Leiria (IPL)

Financing Institution: FCT (POCI/SAU-BMA/60287/2004)

Project Leader: José Simões (University of Aveiro)

- October 1997 - July 1998

Project: Experimental tracing of the biotoxicity: Alternative *in vitro* technologies to the animal tests

Financing Institution: JNICT (2/2.1/BIO/1156/95)

Project Leader: Vítor Madeira (University of Coimbra)

Papers in international scientific periodicals with referees

8. **Campos E**, McVey CE, Carney RP, Stellacci F, Astier Y, Yates J. Sensing Surface-Modified Gold Nanoparticles by the α -Hemolysin Nanopore (submitted)
7. **Campos E**, Carvalho A, Carreira AS, Coimbra P, Ferreira P, Gil MH. Designing polymeric microparticles for biomedical and industrial applications (manuscript in revision)
6. **Campos E**, Coimbra P, Gil MH. 2013. An improved method for preparing glutaraldehyde cross-linked chitosan-poly(vinyl alcohol) microparticles. *Polymer Bulletin* 70:549-561. DOI: 10.1007/s00289-012-0853-4
5. **Campos E***, Asandei A*, McVey CE, Dias JC, Oliveira ASF, Soares CM, Luchian T, Astier Y. 2012. The role of Lys147 in the interaction between MPSA-gold nanoparticles and the α -hemolysin nanopore. *Langmuir* 28:15643-15650. *co-first authors DOI: 10.1021/la302613g
4. **Campos E***, Cordeiro R*, Santos AC, Matos C, Gil MH. 2011. Design and characterization of bi-soft segmented polyurethane microparticles for biomedical application. *Colloids and Surfaces B: Biointerfaces* 88:477-482. *co-first authors DOI: 10.1016/j.colsurfb.2011.07.037
3. **Campos E**, Moura TF, Oliva A, Leandro P, Soveral G. 2011. Lack of Aquaporin 3 in bovine erythrocyte membranes correlates with low glycerol permeability. *Biochemical and Biophysical Research Communications* 408:477-481. DOI: 10.1016/j.bbrc.2011.04.057
2. Sánchez C*, **Campos E***, Oliva AG. 2009. *Babesia bovis*: Effect of Albumax II and orotic acid in a low-serum in vitro culture. *Experimental Parasitology* 121:274-278. *co-first authors DOI: 10.1016/j.exppara.2008.11.017

1. **Campos E**, Cordeiro R, Alves P, Rasteiro MG, Gil MH. 2008. Formulation and influence of processes variables on polyurethane-based microparticles. *Journal of Microencapsulation* 25:154-169. DOI: 10.1080/02652040701806476

Papers in national periodicals with referees

1. Santos AC, Matos C, Cordeiro R, Brás AR, Oliveiros B, **Campos E**, Alves P, Rasteiro MG, Gil MH. 2008. Assessment of the cytotoxicity of microparticles for controlled drug release in Ophthalmology. *Experimental Pathology and Health Sciences* 2:33-37

Communications

Oral communications

3. **Campos E**, Asandei A, McVey CE, Dias JC, Oliveira ASF, Soares CM, Luchian T, Astier Y. "Sensing modified-gold nanoparticles with the α -hemolysin pore", 9th International Conference on Nanosciences & Nanotechnologies (NN12), 3-6 July 2012, Thessaloniki, Greece
2. **Campos E**, Astier Y. "Capturing single gold nanoparticles inside an engineered α -hemolysin nanopore", EuroNanoForum 2011, 30 May-1 June 2011, Budapest, Hungary
1. **Campos E**, Ferreira P, Leite E, Gil MH. "Polycaprolactone diol copolymers to be applied as biomaterials", I CICS Symposium, 4 July 2006, Covilhã, Portugal

Posters in conferences

2. **Campos E**, Leite E, Gil MH. "Polyurethane microparticles as a potential ocular drug delivery system", 6th Advanced Course in Cell-Material Interactions at Molecular Level, 20 – 24 June 2005, Porto, Portugal
1. Vicente JAF, Peixoto F, **Campos E**, Madeira VMC. "Bovine Serum Albumin as a Protective Agent of the Mitochondrial Membrane Permeability as affected by some Herbicides", 10th European Bioenergetics Conference, 27 June – 2 July 1998, Goteborg, Sweden