

CURRICULUM VITAE
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Name: Félix Rico Camps
Current position: Fulbright Postdoctoral Fellow
(Supervisor: Dr. Vincent T. Moy)
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Date and place of birth: November 2 1976, Barcelona (Spain)

Education

2006 PhD in Biophysics by the University of Barcelona (UB)
Thesis title: Study of viscoelasticity and adhesion of human alveolar epithelial cells by atomic force microscopy. The importance of probe geometry.
Research Supervisor: Prof. Daniel Navajas
2000 MA in Scientific Communication (Scientific Museology), Pompeu Fabra University
1999 BS in Physics, Autonomous University of Barcelona

Teaching experience

2001-2005 Undergraduate teaching assistant: *Biophysics* UB School of Medicine
2003-2005 Graduate teaching assistant: *Bioengineering*, UPC/UB

Relevant publications

Rico F and VT Moy. Energy landscape roughness of the streptavidin-biotin interaction. *Journal of Molecular Recognition* (*In press*)
Rico F, P Roca-Cusachs, R Sunyer, R Farré and D Navajas. Cell dynamic adhesion and elastic properties probed with cylindrical atomic force microscopy cantilever tips. *Journal of Molecular Recognition* (*In press*)
Puig F, **F Rico**, I Almendros, JM Montserrat, D Navajas and R Farré. Vibration Enhances Interleukin-8 Release In A Cell Model Of Snoring-Induced Airway Inflammation. *Sleep* 28 (10) 1312-1316 2005
Rico F, P Roca-Cusachs, N Gavara, R Farré, M Rotger and D Navajas. Probing Mechanical Properties of Living Cells by Atomic Force Microscopy with Blunted Pyramidal Cantilever Tips. *Phys Rev E* 72 (2) 021914 2005
Roca-Cusachs P, **F Rico**, E Martínez, J Toset, R Farré and D Navajas. Stability of Microfabricated High Aspect Ratio Structures in Poly(dimethylsiloxane). *Langmuir* 21 (12), 5542-5548 2005
Rico F, J Alcaraz, JJ Fredberg and D Navajas. Nanomechanics of Lung Epithelial Cells. *Int J Nanotechnology* 2 (1/2) 180–194 2005

Trepát X, M Grabulosa, L Buscemi, **F Rico**, R Farré and D Navajas. Thrombin and histamine induce stiffening of alveolar epithelial cells. *Journal of Applied Physiology* 98:1567-1574, 2005.

Rico F, X Fernández-Busquets and G Gomila. Applications of Atomic Force Microscopy in Biology in Phantoms Report on Scanning Probe Microscopy: Basic Concepts and Applications. *Phantoms Report* 2 81 2003

Trepát X, M Grabulosa, L Buscemi, **F Rico**, B Fabry, JJ Fredberg and R Farre. Oscillatory Magnetic Tweezers Based On Ferromagnetic Beads and Simple Coaxial Coils. *Review of Scientific Instruments* 74 (9) 4012-20 2003

Grabulosa M, L Buscemi, J Alcaraz, X Trepát, **F Rico** and D Navajas. Nanotecnologies en mecànica molecular i cel·lular. Biofísica molecular. *Treballs de la Societat Catalana de Biologia*, 53 91-99 2002

Book chapters

Rico F, EP Wojcikiewicz and VT Moy. Atomic force microscopy studies of the mechanical properties of living cells on Applied Scanning Probe Methods, Vol. II, B. Bhushan, H. Fuchs, M. Tomitori, eds., Springer, New York, 2008 (*In press*)

Congresses contributions

Rico F, Y Qin and VT Moy. Temperature dependence of molecular interactions measured by dynamic force spectroscopy. Energy Landscape Roughness. AFMBiomed Conference, Barcelona, Spain, April 19-21, 2007

Rico F, Y Qin, R Koenen, C Weber and VT Moy. Dynamic strength of the integrin alphaL open I domain/Intercellular Adhesion Molecule 1 interaccion. Biophysical Society 51st Annual Meeting. Baltimore, MD, USA, March 3-7, 2007

Rico F, Y Qin and VT Moy. Free energy landscape of molecular interactions by single molecule force measurements. Miami Nature Biotechnology Winter Symposium, Miami, FL, USA, 27-31 Jan, 2007

Farré R, F Puig, **F Rico**, M Rotger, JM Montserrat and D Navajas. Inflammation induced in bronchial epithelial cells by vibration at snoring frequencies: Role of MAP kinase pathways in the production of IL-8. (Abstract) International Conference American Thoracic Society, San Diego, CA, USA, May, 2005

Rico F, P Roca-Cusachs and D Navajas. Nanofabrication of cylindrical cantilever tips for probing mechanical properties of biopolymers by atomic force microscopy 2nd NanoSpain Workshop, Barcelona, Spain, 14-17 March, 2005

Rico F, L Buscemi, N Gavara, M Rotger, R Farré and D Navajas, Contact Model for Probing Cell Mechanics by Atomic Force Microscopy with Pyramidal Tips. 1st NanoSpain Workshop, San Sebastián, Spain, 10-12 March, 2004

Rico F, L Buscemi, X Trepát, M Grabulosa, M Rotger, R Farré and D Navajas. Measurement of the Elastic Modulus of Soft Samples with Atomic Force Microscopy Cantilevers. 4th European Biophysics Congress. Alacant, Spain, July 5-9, 2003

Buscemi L, M Grabulosa, X Trepát, **F Rico**, D Navajas and R Farre. Effects of inflammatory mediators on the mechanical properties of human alveolar epithelial cells. Experimental Biology 2003 (FASEB). San Diego, CA, USA, 11-15 April, 2003

Buscemi L, M Grabulosa, **F Rico**, X Trepát, R Farre and D Navajas. Effect of thrombin on the mechanical properties of alveolar epithelial cells measured with atomic force microscopy. Biophysical Society 47th Annual Meeting. San Antonio, CA, USA, March 1-5, 2003

Invited talks

Physiology and Biophysics Departmental Seminar University of Miami, Miami, FL, USA Oct. 2005

IV Jornades de Recerca en Enginyeria Biomèdica, Barcelona, Spain, Jun. 2004

Nanobiotechnology platform meeting, Catalan Bioengineering Reference Centre, Barcelona, Spain, May 2004

II Workshop of the European Network PHYNECS, Sant Feliu de Guíxols, Spain, Jun. 2003

I Workshop of the European Network PHYNECS, Peyresq, France, Sep. 2002

Awards and Fellowships

Fulbright/Generalitat de Catalunya Postdoctoral Fellowship, 2005-2006

Summa cum laude, University of Barcelona, 2006

University of Barcelona Research and Education Graduate Fellowship, 2001-2005

ERASMUS grant from the European Community to study at the University of Pisa (Italy) 1997-1998

Work experience and other skills:

2001 Translation from Italian to Spanish of the book: *Introduzione alla filosofia della scienza* Laterza, Bari 1999. Spanish edition: *Confines: Introducción a la Filosofía de la Ciencia*, 2001, ed. Crítica, Spain

2001 Scientific journalist for the educational site of America Online in Spain, MIZAR Multimedia

Languages: Spanish, Catalan, English, Italian, and French