

*Curriculum vitae*

**Cristian Ruiz Rueda, PhD**

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## **1- PERSONAL DATA**

**Name and surnames:** Dr. Cristian Ruiz Rueda

**Sex:** Male                      **Born:** 28/07/1977

**Telephones:** +34 93 440 70 15 / +34 647 140 006

**E-mail:** Cristian.Ruiz\_Rueda@tufts.edu

**Address:** c/Albéniz 31, 1 1, L'Hospitalet de Llobregat, 08906, Barcelona, Spain

## **2- ACADEMIC DATA**

### **PhD in Environmental microbiology and biotechnology with European Degree (2005)\***

*Institution:* Department of Microbiology, Faculty of Biology, University of Barcelona

*PhD Thesis title:* Microbial lipases with interest in biotechnology and infectious diseases: isolation, characterization and inhibition by natural substances.

*PhD director:* Dr. Pilar Díaz Lucea

*Qualification:* A<sup>+</sup> “cum laude” with European Mention

**\* Extraordinary PhD thesis award conceded**

### **Advanced Studies Diploma and Research competence (2001)**

*Institution:* Department of Microbiology, Faculty of Biology, University of Barcelona

### **Postgraduate research course of the PhD program “Environmental microbiology and biotechnology” (2000–2001)**

*Institution:* Department of Microbiology, Faculty of Biology, University of Barcelona

### **Postgraduate theoretical courses of the PhD program “Environmental microbiology and biotechnology” (1999–2000)**

*Institution:* Departments of Microbiology and Genetics, Fac. Biology, University of Barcelona

### **Graduate in Biology, specialist in Sanitary Biology (1999)**

*Institution:* Faculty of Biology, University of Barcelona

## **3- PROFESSIONAL DATA**

### **Post-Doctoral Associate (from April 2006)**

*Institution:* Center for Adaptation Genetics and Drug Resistance, Tufts University School of Medicine (Director: Stuart B. Levy, M.D.)

### **Partial time associate professor (November 2005–April 2006)**

*Institution:* Department of Microbiology, Faculty of Biology, University of Barcelona

### **University research Staff (2004–2006)**

*Institution:* Department of Microbiology, Faculty of Biology, University of Barcelona

### **PhD Fellowship (FI-FIAP) from the Catalanian Government (2000–2003)**

*Institution:* Department of Microbiology, Faculty of Biology, University of Barcelona

### **University researcher (January-February 2004)**

*Institution:* Department of Human Physiology and Pharmacology, University of Rome ‘La Sapienza’, Rome, Italy

**Travel Fellowship (FI-FIAP) from the Catalanian Government (October-December 2003)**

*Institution:* Department of Human Physiology and Pharmacology, University of Rome ‘‘La Sapienza’’, Rome, Italy    *Research Group:* Dr. Luciano Saso

**Travel Fellowship (FI-FIAP) from the Catalanian Government (April-July 2002).**

*Institution:* Department of Human Physiology and Pharmacology, University of Rome ‘‘La Sapienza’’, Rome, Italy    *Research Group:* Dr. Luciano Saso

**Department Collaboration Fellowship from the Spanish Ministry of Education (MEC) for undergraduate students (1998-1999)**

*Institution:* Department of Microbiology, Faculty of Biology, University of Barcelona

## **4- RESEARCH ACTIVITY**

### **4.1- SCIENTIFIC PUBLICATIONS**

**Ruiz, C., Falcocchio, S., Pastor, F.I.J., Saso, L. and Díaz, P.** EstV, a novel bacterial lipase belonging to family V, is the first lipase from the pathogen *Helicobacter pylori*, and also from an epsilon-proteobacteria, cloned and characterized. *Appl. Environ. Microbiol.* Submitted.

**Falcocchio, S., Ruiz, C., Pastor, F.I.J., Saso, L. and Díaz, P.** (2006) *Propionibacterium acnes* GehA lipase, involved in acne development, can be successfully inhibited by selected natural substances. *J. Mol. Catal. B Enzym.* In press.

**Ruiz, C., Falcocchio, S., Xoxi, E., Villo, L., Nicolosi, G., Pastor, F.I.J., Díaz, P. and Saso, L.** (2006) Inhibition of *Candida rugosa* lipase by saponins, flavonoids and alkaloids. *J. Mol. Catal. B Enzym.* In press.

**Prim, N., Ruiz, C., Bofill, C., Pastor, F.I.J., and Diaz, P.** (2005) Isolation of lipolytic microorganisms from subtropical soils. Cloning, purification and characterization of a novel esterase from strain *Pseudomonas* sp. CR-611. *J. Biotechnol.* 118: S120.

**Falcocchio, S., Ruiz, C., Pastor, F.I.J., Saso, L. and Díaz, P.** (2005) Identification of a carboxylesterase-producing *Rhodococcus* soil isolate. *Can. J. Microbiol.* 51(9): 753–758.

**Ruiz, C., Pastor, F.I.J. and Díaz, P.** (2005) Isolation of lipid- and polysaccharide-degrading microorganisms from subtropical forest soil, and analysis of lipolytic strain *Bacillus* sp. CR-179. *Lett. Appl. Microbiol.* 40: 218–22.

**Ruiz, C., Falcocchio, S., Xoxi, E., Pastor, F.I.J., Díaz, P. and Saso, L.** (2004) Activation and Inhibition of *Candida rugosa* and *Bacillus*-related lipases by Saturated Fatty Acids, Evaluated by a New Colorimetric Microassay. *Biochim. Biophys. Acta* 1672: 184–191.

**Ruiz, C., Pastor, F.I.J. and Díaz, P.** (2003) Isolation and characterization of *Bacillus* sp. BP-6 LipA, a ubiquitous lipase among mesophilic *Bacillus* species. *Lett. Appl. Microbiol.* 37: 354–359.

**Prim, N., Sánchez M., Ruiz, C., Pastor, F.I.J. and Díaz, P.** (2003) Use of methylumbeliferyl-derivative substrates for lipase activity characterization. *J. Mol. Catal. B Enzym.* 22: 339–346.

**Ruiz, C., Blanco, A., Pastor, F.I.J. and Díaz, P.** (2002) Analysis of *Bacillus megaterium* lipolytic system and cloning of LipA, a novel subfamily I.4 bacterial lipase. *FEMS Microbiol. Lett.* 217: 263–267.

#### 4.2- ORAL COMUNICACIONES IN MEETINGS

**Cristian Ruiz, Serena Falcocchio, F. I. Javier Pastor, Luciano Saso and Pilar Díaz** “Cloning, biochemistry and molecular biology of *Propionibacterium acnes* and *Helicobacter pylori* lipases”. II International Workshop “Synthesis, testing and Pharmacological Applications of Lipase Inhibitors”. Rome, Italy. July 2004.

**Cristian Ruiz, Serena Falcocchio, Entela Xoxi, Ly Villo, Giovanni Nicolosi, F. I. Javier Pastor, Pilar Díaz and Luciano Saso** “Inhibition of *Candida rugosa*, *Helicobacter pylori* and *Propionibacterium acnes* lipolytic enzymes by natural substances”. II International Workshop “Synthesis, testing and Pharmacological Applications of Lipase Inhibitors”. Rome, Italy. July 2004.

**Cristian Ruiz, F.I. Javier Pastor and Pilar Díaz** “Screening of lipid- and polysaccharide-degrading microbial strains isolated from subtropical forest soils”. XVIII Meeting of the Spanish society of Microbiology. Alicante, Spain. September 2001.

**Pilar Díaz, Nuria Prim, Marta Sánchez, Cristian Ruiz and F.I. Javier Pastor** “MUF-derivative substrates as useful tools for fast and accurate lipase activity detection”. International Workshop “Synthesis, testing and Pharmacological Applications of Lipase Inhibitors”. Rome, Italy. July 2001.

**F. I. Javier Pastor, Nuria Prim, Óscar Gallardo, Cristian Ruiz, Teresa Vidal and Pilar Díaz** “Development of lipases with application in paper industry”. Iberoamerican Meeting of Cellulose and Paper (CIADICYP). Puerto Iguazú, Argentina. October 2000.

#### 4.3- WRITTEN COMUNICACIONES IN MEETINGS

**Cristian Ruiz, Serena Falcocchio, F. I. Javier Pastor, Luciano Saso, Pilar Díaz** “Natural substances as lipase inhibitors. Saponins, flavonoids and alkaloids: new therapeutical agents?”. International Symposium on environmental biocatalysis “EnvBc 2006”. Cordoba, Spain. April 2006.

**Cristian Ruiz, Serena Falcocchio, Luciano Saso, Pilar Díaz**, “Cloning, purification and characterization of a novel lipase from *Helicobacter pylori* 26695”. XX Meeting of the Spanish society of Microbiology. Cáceres, Spain. September 2005.

**Núria Prim, Cristian Ruiz, Cristina Bofill, F.I. Javier Pastor, Pilar Díaz**, “Isolation of lipolytic microorganisms from subtropical soils. Cloning, purification and characterization of a novel esterase from strain *Pseudomonas* sp. CR-611”. 12<sup>th</sup> European Congress on Biotechnology. Copenhagen, Denmark. August 2005.

**Núria Prim, Cristian Ruiz, Cristina Bofill, F.I. Javier Pastor, Pilar Díaz**, “Isolation of lipid-degrading microorganisms from subtropical forest soil, and analysis of lipolytic strain *Pseudomonas* sp. CR-611”. Cost E23 Action on “Biotechnology for the Pulp and Paper Industry: From Tailor-Made Biocatalysts to Mill Application”. Baiona, Spain. April 2005.

**C. Ruiz, S. Falcocchio, E. Xoxi, L. Villo, F.I J. Pastor, P. Díaz, L. Saso** “Inhibition of *Candida rugosa* lipase by saponins, flavonoids and alkaloids”. BIOTEC' 2004 Meeting of the Spanish Society of Biotechnology. Oviedo, Spain. July 2004.

**Cristian Ruiz, Serena Falcocchio, Entela Xoxi, Pilar Díaz, Luciano Saso**. “Inhibition of microbial lipases evaluated by a new colorimetric microassay and by High Pressure Liquid Chromatography”. XIX Meeting of the Spanish society of Microbiology. Santiago de Compostela, Spain. Sept. 2003.

**Cristian Ruiz, F.I. Javier Pastor and Pilar Díaz** “Isolation cloning and characterization of *Bacillus* sp. BP-6 and *Bacillus megaterium* lipases”. IX Meeting on industrial applications of enzymes. Barcelona, Spain. November 2001.

