

# **Curriculum vitae**

# **VIOLETA ZORRAQUINO**

## **PERSONAL DATA**

**Surnames:** Zorraquino Salvo  
**Name:** Violeta  
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**Date of Birth:** 11/09/1984  
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**Citizenship:** Spanish (EU citizen)

## **EDUCATION**

**2008-2012** **Phd in Biotechnology**, Universidad Pública de Navarra (Spain).



- In Microbial Biofilms laboratory under supervision of Prof. Iñigo Lasa.
- The thesis obtained a mark of *cum laude*.
- Finalist in Three Minute Thesis competition.

**2006-2008** **Master in Biotechnology**, Wageningen Universiteit (The Netherlands).



- Specialization in molecular and cellular biotechnology.
- The thesis obtained a mark of 9.

**2003- 2006** **Agricultural Engineer**, Universidad Pública de Navarra (Spain).



- The thesis obtained a mark of 10.

## **WORK EXPERIENCE**

**07/2008-09/2012** **Researcher at CSIC**



- In the Microbial Biofilms laboratory under the supervision of Iñigo Lasa and Cristina Solano.

**07/2006-09/2006** **Laboratory technician at UPNA**



- Microbial laboratory technical support.

**01/2006-06/2006** **Assistant in microbiology practical courses at UPNA**



- Technical support.
- Preparation of the practical courses.

## **LANGUAGES**

**English:** Fluent.  
**Spanish:** Native.  
**German:** Basic.  
**Chinese:** Basic.

## COURSES

2010 Host-Microbes interactions (EMBO/FEBS Lecture course)



Tutorials on DNA sequencing technologies, imaging...

2007 First Aid (Fremap).



Basic knowledge to act in case of labor accident.

2007 Risk prevention from biological risk (CSIC),



Focused on the use of genetically modified organisms (GMO).

## TECHNICAL FORMATION

**Molecular biology techniques:** DNA and RNA extraction from different biological samples, primer design, PCR, sequencing, quantitative PCR, RT-PCR, cloning, generation of genetic tools for protein expression, site directed mutagenesis, random mutagenesis.

**Protein analysis techniques:** Production and purification of recombinant proteins, SDS-PAGE, Western blotting, Coomassie and silver staining, Far Western blotting, protein identification, pull-down assays for protein interactions, protein tagging, immunofluorescence.

**Tissue culture:** Basic use of flow cytometry.

**Microscopy:** Basic use of confocal microscopy, fluorescence microbiology, image analysis, video recording.

**Bioinformatics:** analysis of DNA and protein sequences, basic statistical analysis.

## PUBLICATIONS

- **Violeta Zorraquino**, Begoña García, Cristina Latasa, Maite Echeverz, Alejandro Toledo-Arana, Jaione Valle, Iñigo Lasa and Cristina Solano. *Coordinated c-di-GMP repression of Salmonella motility through YcgR and cellulose*. Journal of Bacteriology. Published ahead of print 16 November 2012.

\*\* Article selected for micro commentary and highlighted by the ASM.

- Fabian Blombach, Helene Launay, **Violeta Zorraquino**, Daan C. Swarts, Lisa D. Cabrita, Dario Benelli, John Christodoulou, Paola Londei, and John van der Oost. *An HflX-Type GTPase from Sulfolobus solfataricus Binds to the 50S Ribosomal Subunit in All Nucleotide-Bound States*. Journal of Bacteriology. June 2011 ; 193:2861-2867.

- Cristina Solano, Begoña García, Cristina Latasa, Alejandro Toledo-Arana, **Violeta Zorraquino**, Jaione Valle, Joan Casals, Enrique Pedroso and Iñigo Lasa. *Genetic reductionist approach for dissecting individual roles of GGDEF proteins within the c-di-GMP signaling network in Salmonella*. PNAS. May 2009; 106: 197997-8002

## PATENT

- Cristina Solano, Begoña García, Alejandro Toledo-Arana, Cristina Latasa, **Violeta Zorraquino**, Jaione Valle, Iñigo Lasa. PROTOCOL TO PRODUCE MULTIPLE MODIFICATIONS IN THE CHROMOSOME OF GRAM NEGATIVE BACTERIA AND SALMONELLA STRAINS DEFICIENT ON c-di-GMP PRODUCTION OBTAINED WITH THIS PROTOCOL. PCT/ES2008/070211.

## CONFERENCES

- García, B., Solano, C., Latasa, C., **Zorraquino, V.**, Penadés, J., and Lasa, I. *Análisis de la equivalencia funcional de las proteínas GGDEF de Salmonella enteritidis*. XXI Congreso Nacional de Microbiología. Sevilla (España). 17-20 de Septiembre. 2007.
- Fabian Blombach, Hao Wu, Lei Sun, **Violeta Zorraquino**, Stan Brouns, Xuejun Zhang, Zihe Rao, and John van der Oost. *Hfq GTPases: interacting with the translation machinery*. Molecular biology of Archaea. University St Andrews (GB). 19-21 August 2008.
- **Zorraquino, V.**, García, B., Latasa, C., Lasa, I. and Solano, C. *Estudio del papel de las proteínas GGDEF en la virulencia de Salmonella*. VII Reunión de Microbiología Molecular Cádiz (Spain). September 2008
- García, B., Solano, C., Latasa, C., Toledo-Arana, A., **Zorraquino, V.**, Valle, J., Casals, J., Pedroso, E. and Lasa, I. *Análisis transcriptómico de la ruta de señalización del mensajero secundario c-di-GMP*. VII Reunión de Microbiología Molecular. Cádiz (Spain). September 2008
- C. Solano, B. García, C. Latasa, A. Toledo-Arana, **V. Zorraquino**, J. Valle and I. Lasa. *Dissection of c-di-GMP signalling in Salmonella*. Eurobiofilms 2009 Rome (Italy). September 2009.
- **Violeta Zorraquino**, Begoña García, Cristina Latasa, Jaione Valle, Alejandro Toledo-Arana, Iñigo Lasa and Cristina Solano. *Estudio de la regulación de la síntesis de c-di-GMP por las proteínas GGDEF en Salmonella*. SEM 2009. Almería (Spain). September 2009.

- Cristina Solano, Begoña García, Cristina Latasa, Alejandro Toledo-Arana, **Violeta Zorraquino**, Jaione Valle, Joan Casals, Enrique Pedroso and Iñigo Lasa. *Dissection of c-di-GMP signaling in Salmonella*. SEM 2009 Almería (Spain). September 2009.
- Cristina Solano, Begoña García, Cristina Latasa, Alejandro Toledo-Arana, **Violeta Zorraquino**, Jaione Valle and Iñigo Lasa. *Contribution of GGDEF domain proteins signaling network to Salmonella biology*. Pathogenomics 2010. Pecs (Hungria). April 2010.
- **Violeta Zorraquino** and Iñigo Lasa. *Identification of c-di-GMP targets involved in Salmonella motility*. Host-Microbes interactions (EMBO/FEBS Lecture course)..Spetses Island (Greece). September 2010.
- C. Latasa, C. Solano, B. García, **V. Zorraquino**, A. Toledo-Arana, J. Valle and Iñigo Lasa. *Design of bacteria "á la carte" for the development of live attenuated Salmonella vaccines*. Biospain 2010. Pamplona (Spain). September 2010.
- C. Solano, J. Valle, A. Toledo-Arana, B. García, C. Latasa, M. Vergara, M. Villanueva, **V. Zorraquino**, I. Ruiz de los Mozos and Iñigo Lasa. *Biotechnology of biofilms: strategies to control the bacterial community life style*. Biospain 2010. Pamplona (Spain). September 2010.
- A. Toledo-Arana, M. Villanueva, I. Ruiz de los Mozos, J. Valle, C. Solano, C. Latasa, B. García, M. Vergara, **V. Zorraquino** and Iñigo Lasa. *Unravelling the secrets of bacterial transcriptome for identification of new targets against bacterial pathogens*. Biospain 2010. Pamplona (Spain). September 2010.
- J. Valle, B. García, C. Solano, A. Toledo-Arana, C. Latasa, M. Vergara, M. Villanueva, **V. Zorraquino**, I. Ruiz de los Mozos and Iñigo Lasa. *Micro-nano patterned surfaces for bacterial adherence control applications*. Biospain 2010. Pamplona (Spain). September 2010.
- **V. Zorraquino**, Begoña García, Cristina Latasa, Jaione Valle, Alejandro Toledo-Arana, Iñigo Lasa and Cristina Solano. *Estudio del mecanismo de inhibición de la movilidad de Salmonella mediado por c-di-GMP*: VIII Reunión del grupo de Microbiología Molecular Barcelona (Spain) 10-12 Noviembre 2010
- **Zorraquino, V.**, García, B., Latasa, C., Valle, J., Toledo-Arana, A., Lasa, I. and Solano, C. *El nucleótido cíclico, c-di-GMP, coordina la movilidad y la síntesis de celulosa en Salmonella enterica ser. Enteritidis*. XXIII Congreso Nacional de Microbiología. Salamanca (Spain). 11-14 de Julio. 2011.

- García, B., Solano, C., Latasa, C., **Zorraquino, V.**, Echeverz, M., García, E., Gil, C., Valle, J., Toledo-Arana, A. and Lasa, I. *Análisis proteómico de la ruta de señalización del mensajero secundario c-di-GMP*. Salamanca (Spain). 11-14 de Julio. 2011.

## REFERENCES

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