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### **EDUCATION**

**2005-2010:** PhD student. Mycobacterial Research Unit. Microbiology Department. Faculty of Medicine-Hospital Clínic. University of Barcelona, Spain.

**2008:** 3-month Fellowship in the Applied and Functional Genomics and Proteomics Department, Centre for Infection Disease, Health Protection Agency. London, UK.

**2006:** 2-month Fellowship in the Molecular Biology department, Hospital Gregorio Marañón, Madrid, Spain.

**2003:** 6-month Fellowship in the Clinical Biochemistry Department at the Staten's Serum Institute. University of Copenhagen, Denmark.

**2003:** BSc Biology, Clinical and Microbiology Specialty, University of Barcelona, Spain.

### **PROFESSIONAL EXPERIENCE**

**2010-Present:** BSL3 Lab manager and scientific collaborator at the Tuberculosis Research Unit at the Swiss TPH. Basel, Switzerland.

**2009-2010:** Postdoctoral Fellow. Mycobacterial Research Division. National Medical Research Institute (NIMR). London, UK.

**2001-2005:** Periodical substitutions as a Laboratory technician in the Microbiology department, Hospital of Mataró. Barcelona, Spain.

## PUBLICATION RECORD

- Comas I, Coscolla M, Luo T, **Borrell S.** *et al.* Out-of-Africa migration and Neolithic coexpansion of *Mycobacterium tuberculosis* with modern humans. *Nat Genet.* 2013 Oct; 45(10):1176-82.
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- Ballif M, Harino P, Ley S, Coscolla M, Niemann S, Carter R, Coulter C, **Borrell S.** *et al.* Drug resistance-conferring mutations in *Mycobacterium tuberculosis* from Madang, Papua New Guinea. *BMC Microbiol.* 2012 Sep 4; 12: 191.
- Ballif M, Harino P, Ley S, Carter R, Coulter C, Niemann S, **Borrell S.** *et al.* Genetic diversity of *Mycobacterium tuberculosis* in Madang, Papua New Guinea. *Int J Tuberc Lung Dis.* 2012 Aug;16(8):1100-7.

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- Malla B, Stucki D, **Borrell S. et al.** First insights into the phylogenetic diversity of *Mycobacterium tuberculosis* in Nepal. *PLoS One.* 2012; 7(12):e52297.
- Stucki D, Malla B, Hostettler S, Huna T, Feldmann J, Yeboah-Manu D, **Borrell S. et al.** Two new rapid SNP-typing methods for classifying *Mycobacterium tuberculosis* complex into the main phylogenetic lineages. *PLoS One.* 2012;7(7):e41253.
- Comas, I. **Borrell S. et al.** Whole-genome sequencing of rifampicin-resistant *Mycobacterium tuberculosis* strains identifies compensatory mutations in RNA polymerase genes. *Nat Genet* **44**, 106-110.
- Rey-Jurado E, Tudó G, **Borrell S et al.** Impaired fitness of *Mycobacterium tuberculosis* resistant isolates in a cell culture model of murine macrophages. *J Antimicrob Chemother.* 2011 Oct; 66(10):2277-80.
- **Borrell, S. & Gagneux, S.** Strain diversity, epistasis and the evolution of drug resistance in *Mycobacterium tuberculosis*. *Clin Microbiol Infect* **17**, 815-820.
- Thorne N, **Borrell S. et al.** IS6110-based global phylogeny of *Mycobacterium tuberculosis*. *Infect Genet Evol.* 2011 Jan; 11(1):132-8.
- Fenner L, Malla B, Ninet B, Dubuis O, Stucki D, **Borrell S. et al.** "Pseudo-Beijing": evidence for convergent evolution in the direct repeat region of *Mycobacterium tuberculosis*. *PLoS One.* 2011; 6(9):e24737.

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- **Borrell S.** *et al.* Tuberculosis transmission patterns among Spanish-born and foreign-born populations in the city of Barcelona. *Clin Microbiol Infect.* 2010 Jun; 16(6):568-74.
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- **Borrell S.** *et al.* Comparison of four-colour IS6110-fAFLP with the classic IS6110-RFLP on the ability to detect recent transmission in the city of Barcelona, Spain. *Tuberculosis (Edinb).* 2009 May; 89(3):233-7.
- **Borrell S.** *et al.* Factors associated with differences between conventional contact tracing and molecular epidemiology in study of tuberculosis transmission and analysis in the city of Barcelona, Spain. *J Clin Microbiol.* 2009 Jan; 47(1):198-204