

CINZIA CALVIO

Curriculum Vitae

Cinzia Calvio obtained her first degree *cum laude* in Biology from the University of Pavia in 1990. In 1993 she obtained the degree in Applied Genetics from the Specialization School in “Applied Genetics” at the University of Pavia. She did her first postdoc at the European Molecular Biology Laboratory (EMBL), Heidelberg (D), and a second Postdoc at the European Institute of Oncology - IEO, Milan. She then moved to a commercial company as Product Specialist for automated DNA sequencers and instrumentation for analyses of macromolecular interactions. In 1999 she joined the Dept. of Genetics and Microbiology of the University of Pavia as supervisor of the departmental sequencing facility. In 2003 she joined, the lab of Microbial Genetics at the Dept. of Biology and Biotechnology of Pavia University as Assistant Professor in Genetics. After a long collaboration with Prof. A. Galizzi, from 2009 she is the PI of the Microbial Genetics Laboratory.

C. Calvio main research interest has been the regulation of stationary phase phenotypes in the model organism *Bacillus subtilis*. In particular, she characterized the *swrA* operon necessary for swarming, a specialized form of motility and identified the regulation driving the expression of *swrA*. She demonstrated that the biosynthesis of the polymer poly- γ -glutamate (γ -PGA), with great biotechnological potentiality, is depending on SwrA+DegU and is still optimizing γ -PGA production by genetic engineering. Studies on the enzymatic degradation of γ -PGA led to the identification of several hydrolases among non-characterized *B. subtilis* genes. She analysed the evolutionary pattern of distribution of these genes in microbial genomes and is also exploring their applications as antimicrobial strategic enzymes. Since 2016 she also focusing on the engineering of *B. subtilis* strains for the sustainable production of biotechnological products from agro-industrial by-products. She is also interested in the improvement of bacterial enzyme for industrial catalytic purposes.

C. Calvio currently holds the chair of “*Microbial Genetics*” (in English) for the Master programme in *Molecular Biology and Genetics*. She is also involved in teaching *Microbial biodiversity in soil* at the Master program in Natural Sciences. Since 2004, she supervised over 50 experimental theses for Bachelor, Master and PhD students.

Besides regularly acting as reviewer for several international journals (see [Publon profile](#)), C. Calvio was appointed to the editorial board of *Applied Environmental Microbiology* (from the American Society for Microbiology), as academic editors for *PLOS One* and is in the board of reviewers for *Microbiology sgm*. She is member of the *Microbiology Society* and the *European Federation of Biotechnology*.

Her work has been funded by the Italian Ministry for University and Research (MIUR) (in 2003, in 2005 and in 2008 - For the latter project CC acted as PI/Coordinator); by the “Alma Mater Foundation” (2009); by the Lombardy Region-INSTM consortium (in 2009 and in 2013), by the CARIPO Foundation (two grants in 2015, one as PI; one grant in 2016; one grant in 2018) and by the Ministero degli Affari Esteri e della Cooperazione Internazionale & the Polish National Agency for Academic Exchange (NAWA) (Rome/Warsaw) (2019-2020).