

# Chiara Perruchon

## CURRICULUM VITAE ET STUDIORUM

### PERSONAL DETAILS

NAME: Chiara Perruchon

ADDRESS: Ypsilantou 80, 41223 Larissa, Greece

TELEPHONE: 0039 0383 805991

CELL PHONE: 0039 340 7172249, 0030 693 7725474

E-MAIL: perruch@libero.it

DATE OF BIRTH: 18<sup>th</sup> April 1984

PLACE OF BIRTH: Voghera (PV), Italy

NATIONALITY: Italian



### EDUCATION

01/10/2003 to 24/07/2006: **Laurea di primo livello** (3-year undergraduate course, Bachelor of Science equivalent) in Biotechnology at the University of Pavia, Italy.

Final grade after thesis dissertation: 110/110 *cum laude*.

Thesis work, under the supervision of Dr. S. Asticcioli, in the “Laboratory of Microbiology” of the University of Pavia, Principal Investigator: Prof. L. Pagani.

Thesis title: “Prevalenza e sensibilità in vitro agli antifungini di isolati di *Candida spp.* da micosi profonde” (Prevalence and in vitro sensitivity to antifungal agents of *Candida spp.* isolates from deep mycosis).

01/10/2006 to 05/02/2009: **Laurea Magistrale** (2-year course, Master of Science equivalent) in Industrial Biotechnology at the University of Pavia, Italy.

Final grade after thesis dissertation: 110/110 *cum laude*.

Thesis work on the ability of selected fungi to degrade some pesticides for the creation of a biofilter, as a guest in Dr. Dimitrios Karpouzas’ laboratory in the Department of Biochemistry and Biotechnology of the University of Thessaly, Larissa, Greece.

Thesis title: “The use of selected fungi for the degradation of pesticides contained in post-harvest treatments wastewaters”.

21/10/2009 – 12/06/2014: **PhD** in the area of Environmental Microbiology and Biotechnology, Department of Biochemistry and Biotechnology of the University of Thessaly, Larissa, Greece.

Final grade after thesis dissertation: Excellent.

Thesis work on the isolation and characterization of bacteria able to degrade different pesticides under the supervision of Dr. D. Karpouzas. Doctoral fellow was sponsored by the State Scholarship Foundation of Greece (I.K.Y.).

Thesis title: "Isolation and study of bacteria able to degrade pesticides contained in the wastewaters produced by the fruit-packaging industry".

## **PROFESSIONAL EXPERIENCE**

23/06/2014 - 1/08/2014:

Short scientific visit to UFZ-Leipzig (Germany) through the project ISOPED funded by the IKY-DAAD exchange program: *Do we isolate via in vitro enrichment cultures the right pesticide-degrading bacteria? Mechanisms involved and web-food C transfer*. Duration: 1/01/2014-31/12/2015.

1/09/2014 - 1/03/2015:

Participation to the Industry-Academia Partnership Project (IAPP) Marie Curie project, *Pesticides – Felicity or curse for the soil microbes (Acronym: LOVE-TO-HATE)*. Duration: 1/01/2013 – 31/12/2016. Hosted by ENOVEO, Lyon, France. Website: <http://lovetohate.bio.uth.gr>

15/03/2015-15/08/2015:

PostDoctoral position at the University of Thessaly in the project “BIOREMEDIATOMICS” implemented under the "ARISTEIA" Action of the "OPERATIONAL PROGRAMME EDUCATION AND LIFELONG LEARNING", co-funded by the European Social Fund (ESF) and National Resources.

15/11/2015 - 15/12/2015:

Short scientific visit to UFZ-Leipzig (Germany) through the project ISOPED funded by the IKY-DAAD exchange program: *Do we isolate via in vitro enrichment cultures the right pesticide-degrading bacteria? Mechanisms involved and web-food C transfer*. Duration: 1/01/2014-31/12/2015.

## **LANGUAGES**

MOTHER TONGUE: Italian

OTHER LANGUAGES: English: Intermediate;  
Greek: Intermediate;  
French: Basic.

## **COMPUTER SKILLS**

Thorough knowledge of Windows operating systems.

## **LABORATORY SKILLS**

- Chromatographic analysis of pesticides (HPLC-UV)
- Spectrophotometric measurements
- Bacteria and fungi growth techniques
- Molecular Biological Techniques: DNA/RNA/protein extraction from bacteria and environmental matrices, cDNA synthesis, PCR, qPCR and RT-qPCR, DGGE, clone libraries, mini and midi-scale plasmid extraction, Risa, Stable Isotope Probing, T-RFLP, fosmid libraries.
- Basic knowledge of bioinformatic tools for bacterial isolation and identification

## PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. Karas P., **Perruchon C.**, Exarhou C., Ehaliotis C., Karpouzas DG., 2011. Potential for bioremediation of agro-industrial effluents with high loads of pesticides by selected fungi. *Biodegradation* 22: 215-228.
2. Moulas C., Petsoulas C., Rousidou C., **Perruchon C.**, Karas P., Karpouzas D.G., 2013. The effects of systemic pesticides imidachloprid and metalaxyl on the phyllosphere of pepper plants. *BIOMED Res. Int.*, Vol. 2013, Article ID 969750,, <http://dx.doi.org/10.1155/2013/969750>.
3. Campos M., **Perruchon C.**, Vasileiadis S., Menkissoglu-Spiroudi U., Karpouzas D. G., Diez M. C., 2015. Isolation and characterization of bacteria from acidic pristine soil environment able to transform iprodione and 3,5-dichloraniline. *Int. Biodeter. Biodegr.*, 104: 201-211.
4. **Perruchon C.**, Zouborlis S., Batianis C., Papadopoulou E., Ntougias S., Vasileiadis S., Karpouzas D. G., 2015. Isolation of a diphenylamine-degrading bacterium and characterization of its metabolic capacities, bioremediation and bioaugmentation potential. *Environ. Sci. Pollut. Res.*, doi:10.1007/s11356-015-5132-0.
5. **Perruchon C.**, Patsioura V., Vasileiadis S., Karpouzas D. G., 2016. Isolation and characterization of a *Sphingomonas* strain able to degrade the fungicide *ortho*-phenylphenol. *Pest Manag. Sci.*, **72**: 113-124.
6. Karas P., **Perruchon C.**, Papadopoulou E., Karanasios E., Manthou E., Sitra S., Ehaliotis C., Karpouzas D. G., 2016. Integrated biodepuration of pesticide-contaminated wastewaters from the fruit-packaging industry: bioaugmentation, risk assessment and optimized management. *J. Haz. Mat.* (submitted).
7. Campos M., Karas P., **Perruchon C.**, Papadopoulou E. S., Christou V., Menkissoglu-Spiroudi U., Diez M. C., Karpouzas D. G., 2016. Novel insights into the metabolic pathway of iprodione by soil bacteria. *Environ. Sci. Pollut. Res.* (submitted)

## ABSTRACTS IN CONFERENCES

1. Karas P., **Perruchon C.**, Ehaliotis C., Karpouzas D.G., 2008. The use of selected fungi for the degradation of pesticides in agro-industrial wastewaters. 1<sup>st</sup> National Conference of the Scientific Society Mikrobiokosmos, 12-14 December 2008, Athens, Greece (oral presentation).
2. **Perruchon C.**, Karas P., Karpouzas D.G., 2010. The potential biotechnological amelioration of biobed-biofilter system for treating wastewaters from the fruit packaging industry. 3<sup>rd</sup> European Biobed Workshop, 31 August -1 September 2010, Piacenza, Italy (poster).
3. **Perruchon C.**, Karas P., Ehaliotis C., Karpouzas D.G., 2010. Isolation of bacterial consortia rapidly degrading the fungicide thiabendazole-potential utilization for the depuration of wastewaters from fruit packaging plants. 3<sup>rd</sup> Symposium of the Society of Mikrobiokosmos, 16-18 December 2010, Thessaloniki, Greece (poster).
4. **Perruchon C.**, Karas P., Patsioura V., Karpouzas D.G., 2011. Towards the development of a biofilter for treating pesticide-contaminated wastewaters from the fruit packaging industry. XIV Symposium in Pesticide Chemistry, 30 August-1 September, Piacenza, Italy (oral presentation).

5. **Perruchon C**, Patsioura V, Vasileiadis S., Puglisi E, Trevisan M, Karpouzas D.G., 2012. Isolation, characterization and genomic analysis of a *P. stutzeri* strain OPP26 which is able to rapidly degrade the fungicide 2-phenylphenol. 5<sup>th</sup> Symposium of the Society of Mikrobiokosmos, 13-15 December 2012, Athens, Greece (poster).
6. **Perruchon C**, Vasileiadis S, Puglisi E, Trevisan M, Karpouzas D.G., 2013. Isolation, characterization and genomic analysis of bacteria rapidly degrading the fungicide 2-phenylphenol. FEMS conference, Leipzig, Germany, 21-25 July 2013 (poster).
7. Karas P., **Perruchon C.**, Omirou M., Ehaliotis, C., Karpouzas D.G., 2013. The use of biobeds for the depuration of wastewaters from the fruit packaging industry – Turning from on-farm to post-farm applications. 4<sup>th</sup> European Biobeds Meeting, Wageningen, The Netherlands (oral presentation).
8. Campos M., Karpouzas D. G., **Perruchon C.**, Cartes A., Diez M. C., 2014. Isolation of similar iprodione pesticides and their dichloroanilines (DCAs) metabolites by pesticides-degrading rhizobacteria. 9th International Conference ORBIT 2014 New Challenges, New Responses in the 21st Century Gödöllő, Hungary, 26-28 June 2014 (poster).
9. **Perruchon C.**, Rousidou K., Vasileiadis S., Amoutzias G., Papadopoulou E., Tanou G., Molassiotis A., Karpouzas D. G., 2014. Isolation and characterization of bacteria able to degrade pesticides used in the fruit-packaging industry. First Global Soil Biodiversity Conference, Dijon, France, 2-5 December 2014 (poster).
10. **Perruchon C.**, Pantoleon A., Chatzinotas A., Vasileiadis S. , Omirou M., Karpouzas D. G., 2015. Isolation of bacterial consortia degrading the fungicide thiabendazole and identification of the role of their members via SIP-DGGE and q-PCR analysis. 6<sup>th</sup> Symposium of the Society of Mikrobiokosmos, Athens, Greece, 3-5 April 2015 (poster).
11. **Perruchon C.**, Rousidou K., Papadopoulou E. S., Batianis C., Zouborlis S., Vasileiadis S., Tanou G., Molassiotis A., Amoutzias G., Karpouzas D. G., 2015. Isolation and proteogenomic characterization of a diphenylamine-degrading *Pseudomonas putida* bacterium. 6<sup>th</sup> Symposium of the Society of Mikrobiokosmos, Athens, Greece, 3-5 April 2015 (poster).
12. **Perruchon C.**, Papadopoulou E. S., Rousidou K., Vasileiadis S., Tanou G., Amoutzias G., Karpouzas D. G., 2015. A proteogenomic analysis of a *Sphingomonas haloaromaticamans* strain able to degrade the fungicide ortho-phenylphenol used in the fruit-packaging industry. 6<sup>th</sup> Symposium of the Society of Mikrobiokosmos, Athens, Greece, 3-5 April 2015 (oral presentation).
13. **Perruchon C.**, Papadopoulou E., Rousidou K., Vasileiadis S., Tanou G., Molassiotis A., Amoutzias G., Karpouzas D.G., 2015. Isolation and proteogenomic analysis of a *Sphingomonas haloaromaticamans* strain able to degrade the fungicide *ortho*-phenylphenol used in the fruit-packaging industry. 13<sup>th</sup> Symposium on Bacterial Genetics and Ecology (BAGECO), Milan, Italy, 14-18 June 2015 (poster).
14. **Perruchon C.**, Pantoleon A., Chatzinotas A., Donner E., Vasileiadis S., Karpouzas D. G., 2015. Deciphering the roles of the members of a bacterial consortium in the degradation of thiabendazole: combining SIP-DGGE with meta-omics. 13<sup>th</sup> Symposium on Bacterial Genetics and Ecology (BAGECO), Milan, Italy, 14-18 June 2015 (poster).

15. Papadopoulou E. S., **Perruchon C.**, Omirou M., Stamatopoulou N., Karpouzas D. G., 2015. Bioaugmentation as a depuration treatment for soils polluted with pesticides from the fruit-packaging industry wastewater. 2<sup>nd</sup> Environmental Conference of Thessaly, Skiathos Island, Greece, 26-28 September 2015 (oral presentation).
16. **Perruchon C.**, Papadopoulou E. S., Rousidou K., Vasileiadis S., Tanou G., Karpouzas D. G., 2016. "A proteogenomic approach to elucidate the metabolic pathway of the fungicide *ortho*-phenylphenol by a *Sphingomonas haloaromaticamans* strain." 1<sup>st</sup> ABBEM conference: Applied Biotechnology, Biodegradation and Environmental Management: Bridging the Gap between Academia and Industry, Agrinio, Greece, 28-29 January 2016 (oral presentation).