



## ***Personal Informations:***

**Surname:** Marchesini

**Name:** Federica

**Mail:** federica.marchesini01@universitadipavia.it

**Nationality:** Italian

**Date of birth:** 11th May 1993

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## ***Work experiences:***

**Dates (from - to):** September 2021-today

**Name and address of employer:** middle school “A Omodeo” Torrevecchia Pia IC Landriano

**Type of sector:** MIUR, middle school

**Occupation and position held:** tenured teacher

**Main activities and responsibilities:** teaching math and science.

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**Dates (from - to):** October 2019-September 2021

**Name and address of employer:** University of Pavia, Clinical-Surgery-Diagnostics- Pediatric Department, at Viale Brambilla in Pavia.

**Type of sector:** Microbiology and clinical microbiology laboratory

**Occupation and position held:** Research fellow

**Main activities and responsibilities:** Monitoring colonization and/or infection from Gram-Negative multiresistant microorganism in long term care facilities patients.

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**Dates (from - to):** October-November 2020

**Name and address of employer:** University of Pavia, Clinical-Surgery-Diagnostics- Pediatric Department, at Viale Brambilla in Pavia.

**Type of sector:** Applied Microbiology laboratory ( Senior Professor Elisabetta Nucleo)

**Occupation and position held:** laboratory tutor

**Main activities and responsibilities:** Support for students in laboratory techniques. Growth media, microbial identification e resistances profiles, Eucast guidelines, DNA extraction and quantification, PCR, mlst, microarray).

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**Dates (from - to):** June 2019-September 2019

**Name and address of employer:** University of Pavia, Clinical-Surgery-Diagnostics- Pediatric Department, at Viale Brambilla in Pavia.

**Type of sector:** Microbiology laboratory

**Occupation and position held:** Freelance worker

**Main activities and responsibilities:** Phenotypic and molecular characterization of opportunistic MDR bacteria from clinical and environmental samples in surveillance projects.

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**Dates (from - to):** November2018-May 2019

**Name and address of employer:** University of Pavia, Clinical-Surgery-Diagnostics- Pediatric Department, at Viale Brambilla in Pavia.

**Type of sector:** Microbiology laboratory

**Occupation and position held:** Voluntary

**Main activities and responsibilities:** Experimental and data elaboration experience. The main techniques performed are about identification of microbial species and anti-biotype of environmental, veterinary and clinical samples. The semi-automatic Microscan Autoscan-4 system (software LabPro) allowed this method, according to the EUCAST 2019 guidelines for the results interpretation. Resistance mechanism have been studied through phenotypic test ( disk diffusion

and disk combination) for the evaluation of ESBL and/or carbapenemases producer. Molecular test have been used too: Microarray, PCR, and sequencing. *Pulse-Field Gel Electrophoresis (PFGE)* e *Multilocus Sequence typing (MLST)* have been used for clonality studies.

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**Dates (from - to):** February- July 2018

**Name and address of employer:** University of Pavia, Clinical-Surgery-Diagnostics- Pediatric Department, at Viale Brambilla in Pavia.

**Type of sector:** Microbiology laboratory

**Occupation and position held:** Short trainee

**Main activities and responsibilities:** Training on main microbiologic diagnostic methods on environmental and clinical samples. The main techniques performed are about Molecular Biology and Genetics, searching Resistance genes in different strains through PCR, electrophoresis, and phenotypic test.

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**Dates (from - to):** March 2017- May 2018

**Name and address of employer:** University Botanic Garden in Pavia  
Type of sector: Micology laboratory

**Occupation and position held:** short trainee for the Master Degree Thesis

**Main activities and responsibilities:** Micology detection of three different services rooms in a biological dairy cattle farm. Using the SAS (Surface air System) we have identified the main strains of fungi present in this company, in order to make some predictions on the milk contamination.

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**Dates (from - to):** March-May 2018

**Name and address of employer:** University Botanic Garden in Pavia

**Type of sector:** Micology laboratory

**Occupation and position held:** Tutor

**Main activities and responsibilities:** Preparing the microscopes and instrumentation in order to help younger students to observe mycological preparation.

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**Dates (from - to):** January-March 2018

**Name and address of employer:** University of Pavia, Biology and Biotechnology Department

**Type of sector:** Bioinformatics and Parasitology Laboratory

**Occupation and position held:** Trainee

**Main activities and responsibilities:** Short training in bioinformatics: analysis of 730 different strains of *Acinetobacter Baumannii* from different clinical samples. Analysis of their MLST (Multi-locus sequence type) using two different systems (Oxford and Pasteur) and phylogenetic analysis through bioinformatic tools in order to understand the origin of the clinical outbreak.

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**Dates (from - to):** September 2016- Today

**Type of sector:** Tecnigas s.r.l

**Occupation and position held:** Part-time secretary

**Main activities and responsibilities:** phone-answering, making dates and customer service.

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**Dates (from - to):** November 2015- May 2016

**Type of sector:** Arca di noè

**Occupation and position held:** Toreader

**Main activities and responsibilities:** dressing table for cats and dogs

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**Dates (from - to):** January - September 2015

**Type of sector:** C.N.R National Research Council (Pavia)

**Occupation and position held:** Trainee

**Main activities and responsibilities:** Internship of Molecular Biology  
Integration of a synthetic plasmid carrying on the SLA gene in a Swine genome.  
Recognition of the insertion in the 3' versus of the genome through PCR and electrophoresis method. This work has been done in order to write the Bachelor Degree Thesis.

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## ***Education and training:***

**Date (from - to):** March-July 2021

**Name and type of organisation providing education:** "Veterinary bacteriology and virology " ad the Department of Veterinary medicine of the University of Milano

**Principal subjects covered:** Veterinary immunology ( Prof.Paola dall'ara),  
veterinary microbiology and virology( Prof. Federica Riva)

**Title of qualification awarded:** passed with  
29/30

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**Date (from - to):** April 2021

**Name and type of organisation providing education:** Policlinico San Matteo  
Pavia Fondazione IRCCS

**Title of qualification awarded:** Daily training (3 days) with the doctor Aurora  
Piazza about preparation of genomic libraries with Illumina Nextera xt Library  
Preparation Kit.

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**Date (from - to):** June-July 2020

**Name and type of organisation providing education:** Language Cert

**Principal subjects covered:** English language certification C1 expert level

**Title of qualification awarded:** Speaking: passed

Reading: High passed

Listening: High passed

Writing: passed

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**Date (from - to):** March-June 2020

**Name and type of organisation providing education:** E-campus University,  
Department of Engineering

**Principal subjects covered:** 12 CFU in Geology and Applied Geology

**Title of qualification awarded:** passed with 29/30

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**Dates (from - to):** June-July 2019

**Name and type of organisation providing education:** University of Pavia

**Title of qualification awarded:** Italian national qualification as Biologist with  
196/200

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**Dates (from - to):** April-June 2018

**Name and type of organisation providing education:** University of Pavia

**Principal subjects covered:** PF 24: Psychology, Pedagogy and Anthropology for  
teaching in middle and high school

**Title of qualification awarded:** passed

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**Dates (from - to):** October 2016-June 2018

**Name and type of organisation providing education:** Master Degree in  
Experimental and Applied Biology (Environmental and Biodiversity field)

**Principal subjects covered:** Study of the biotic and abiotic characteristics of the  
various environments with a multidisciplinary approach.

**Title of qualification awarded:** Master Degree with the qualification of *110/110*  
*CUM LAUDE*

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**Dates (from - to):** April - June 2018

**Name and type of organisation providing education:** University of Pavia

**Principal subjects covered:** PF 24 credits for teaching Science in secondary School. Exams of Psychology, Pedagogy and anthropology.

**Title of qualification awarded:** Qualified

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**Dates (from - to):** October 2012- September 2015

**Name and type of organisation providing education:** University of Pavia, science faculty, Biology and Biotechnology Department

**Principal subjects covered:** Biologic Science

**Title of qualification awarded:** Bachelor Degree with the qualification of 104/110

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**Dates (from - to):** September 2007- June 2012

**Name and type of organisation providing education:** Public Scientific High School Torquato Taramelli

**Principal subjects covered:** Science: Maths, Physisc, Biology, Chemistry, Geology and Astronomic Geography

**Title of qualification awarded:** Scientific High-school Degree with the qualification of 83/100

## ***Congress Participations:***

- ▲ September 2021: 49<sup>th</sup> Italian Microbiology society congress
- ▲ July 2021: 30<sup>th</sup> Eccmid congress held by “Escmid” European Society of Clinical Microbiology and Infectious Diseases. (Online Version)
- ▲ September-November 2020 48<sup>th</sup> Italian Microbiology society congress (Online Version)
- ▲ September 2019: 47<sup>th</sup> Italian Microbiology society congress (Rome, Italy)
- ▲ April 2019: 29<sup>th</sup> Eccmid congress held by “Escmid” European Society of Clinical Microbiology and Infectious Diseases. (Amsterdam, Netherland)

## ***Congress Communications:***

- ▲ **“Extended Spectrum Beta Lactamases (ESBL)- and Carbapenemases-producing *Enterobacteriales* from surface and groundwater in Lombardy, Italy”** *Federica Marchesini, Alessandra Mercato, Aseel Abualsha'ar, Melissa Spalla, Elisabetta nucleo, Francesca Zara, Aurora Piazza, Giorgio Pilla, Roberta Migliavacca*  
*Department of Clinical-Surgical, Diagnostic and Pediatric Sciences, Unit of Microbiology and Clinical Microbiology, University of Pavia, Pavia, Italy; Department of Earth and Environment Sciences, University of Pavia, Pavia, Italy.*  
**Oral communication SIM 2021**
- ▲ Alessandra Mercato, Elisabetta Cortimiglia, **Federica Marchesini**, Assel Abualsha'ar, Aurora Piazza, Silvia Bonardi, Pier Sandro Cocconcelli, Migliavacca Roberta.  
**“ESBLs producing *Escherichia coli* from wild boars in Northern Italy”**  
Abstract and Poster at 31<sup>st</sup> Eccmid congress (online), July 2021.
- ▲ Aseel Abualsha'ar, Gherard Batisti Biffignandi, Aurora Piazza, Paola Prati, Alessandra Mercato, **Federica Marchesini**, Giuseppina Andreoli, Melissa Spalla, Davide Sasserà, Roberta Migliavacca  
**“Detection and Characterization of ST167 NDM-5-producing *Escherichia coli* strain from a cat, in Italy”.**  
Abstract and poster at 31<sup>st</sup> Eccmid congress (online), July 2021.
- ▲ Mercato Alessandra, Vittoria Mattioni Marchetti, **Federica Marchesini**, Ibrahim Bitar, Aurora Piazza, Aseel Abu-alsha'ar, Elisabetta Nucleo, Roberta Migliavacca.  
**“blaVIM harboring IncA plasmid from a clinical ST69 *Escherichia coli* strain in Italy”.**  
Abstract and poster at SIM 2020



- ▲ **Marchesini Federica**, Spalla Melissa, Mercato Alessandra, Mancinelli Marika, Mattioni Marchetti Vittoria, Pilla Giorgio, Sconfiatti Renato, Migliavacca Roberta, Nucleo Elisabetta  
***“Detection of OXA-244 producing E.coli of ST131 from surface water of Pavia urban area, Northern Italy”***  
Abstract at Eccmid congress (virtual)
- ▲ Abu-Alsha’ar Aseel, **Marchesini Federica**, Mercato Alessandra, Mancinelli Marika, Mattioni Marchetti Vittoria, Elena Fogato, Lattanzi Fabio, Nucleo Elisabetta, Migliavacca Roberta  
***“Escherichia coli KPC-2/3, OXA-181, and VIM-1 producers from an Italian Long-term care facility (LTCF)”***  
Abstract at Eccmid congress (virtual)
- ▲ V. Mattioni Marchetti, L. Principe, V. Viaggi, A. Mercato, **F. Marchesini**, M. Mancinelli, E. Nucleo, R. Migliavacca, F. Luzzaro.  
***“One-year monitoring study of epidemiology and antibiotic resistance of Acinetobacter baumannii isolates in one hospital in Northern Italy”***  
Abstract and poster at 12<sup>th</sup> international Symposium on the Biology of *Acinetobacter* 2019, Frankfurt, Germany.
- ▲ **Federica Marchesini**, Alessandra Mercato, Marika Mancinelli, Fabio Lattanzi, Vittoria Mattioni Marchetti, Melissa Spalla, Giorgio Pilla, Roberta Migliavacca, Elisabetta Nucleo  
***“Detection of ESBLs and Carbapenemases-producing Enterobacteriales from surface waters in Pavia area, Northern Italy”***  
Abstract and Poster at SIM 2019
- ▲ Alessandra Mercato, Vittoria Mattioni Marchetti, **Federica Marchesini**, Marika Mancinelli Silvia Bracco, Vanina Rognoni, Adriano Anesi, Elisabetta Nucleo, Roberta Migliavacca.  
***“Rapid detection and containment of a NDM-1 Proteus mirabilis clone in an Italian Hospital”***  
Abstract and poster at SIM 2029

### ***Scientific Publications:***

Gabriele Trespidi, Viola Camilla Scoffone, Giulia Barbieri, **Federica Marchesini**, Aseel Abualsha’ar, Tom Coenye, Francesca Ungaro, Vadim Makarov, Roberta Migliavacca, Edda De Rossi, Silvia Buroni  
***“Anti-staphylococcal activity of the FtsZ inhibitor C109”***  
Pathogens 2021 Jul 13

Vittoria Mattioni Marchetti , Ibrahim Bitar Alessandra Mercato, Elisabetta Nucleo, Federica Marchesini, Marika Mancinelli, Paola Prati, Giada Simona Scarsi, Jaroslav Hrabak, Laura Pagani, Massimo Fabbi e Roberta Migliavacca  
***“Deadly puppy infection caused by an MDR ST58 Escherichia coli 0141 blaCTX-M-15, blaCMY-2, blaDHA-1 and aac (6)-Ib-cr -positive in a breeding kennel OF Central Italy”***  
Front. Microbiol., 15 April 2020 IF 4.235

## ***Other skills and competences:***

**Mother tongue:** Italian

**Other languages:**

**English: Reading: Excellent**  
**Speaking: Good**  
**Writing: Good**

This Knowledge has been obtained through Cambridge Preliminary (PET) and FIRST (FCE) certificates, and C1 language Cert Certification.

**Spanish:** Basic level.

**French:** Elementary level studied at basic level secondary school.

**Chinese:** I can speak a basic level Chinese and I can read Hanyu pingyn.

## *Interests and achievements:*

- Volunteer with unable patients for Anffas of Pavia. I have learnt the patience e the capacity of understanding the diversity of each other, and try to obtain the best from it.
- Volunteer for “OFTAL Milano” as patients caregiver for Lourdes pilgrimage in October 2018.

In my spare time I like reading books, travelling and taking pictures.

I have the Italian driving license.