Dr. LAURA VESCHETTI

Professional qualifications

- 2021: Professional Qualification as **Senior Biologist**
- 2022: **Teaching** Training Course Qualification

Awards and Fellowships

- **Best Oral Presentation** at BBCC2022
- "Hypermutation as an Evolutionary Mechanism for *Achromobacter xylosoxidans* in Cystic Fibrosis Lung Infection" selected as an **Editor's Choice Article** in Pathogens (2021)
- FEMS **Congress Attendance Grant** (2021)
- ECFS **Travel Grant** (2020)
- **PhD fellowship** awarded by Italian Ministry of Research and Education for the period 10/2018-12/2021
- **Scholarships** for university studies for the period 2014-2018.

Summary

Dr. Laura Veschetti focused her research on microbial genomics by tackling questions regarding **microbe-host adaptation**, environmental reservoirs of **antimicrobial resistance**, and interaction of **transcriptome** and **mirnome** in nematodes. Currently, she is investigating the role of **microbiota** in pancreatic cancer and is collaborating on projects involving cutting-edge technologies such as shotgun **metagenomics** and **long-read sequencing**.

Skills

- Bioinformatics
- Sequencing data analysis: Whole Genome Sequencing, Shotgun Metagenomics, Nanopore long-read Sequencing, RNA-Seq (miRNA-3'UTR interactions)
- Microbial adaptation in Cystic Fibrosis lung infection
- Antimicrobial resistance
- Virulence genes
- Mobilome analysis

Latest Work Experience

2022: **Post-doctoral Researcher** at ARC-NET Centre for Applied Research on Cancer, Verona (Italy)

2018-2021: **PhD in Applied Life and Health Sciences** advised by Prof. Giovanni Malerba, Department of Neurosciences, Biomedicine and Movement Sciences, University of Verona

09/2019-12/2019: **Visiting PhD student** advised by Prof. Søren Molin (DTU) and Prof. Helle Krogh Johansen (Rigshospitalet)

Education

2018-2022: **PhD** in Applied Life and Health Science, University of Verona (Italy)

2016-2018: **Master's degree** in Molecular and Medical Biotechnology, University of Verona (Italy), 110 *cum laude*

2013-2016: **Bachelor's degree** in Biomedical Laboratory Techniques, University of Brescia, 110 *cum laude*

Dr. LAURA VESCHETTI

Scientific Publications

Total number: 11; Total first-authorship: 5 (* indicates equal contribution), Total corresponding authorship: 1. H-index: 5. Total citations: 72. (source: Scopus, 28/02/2023. Publications linked to ORCID:0000-0002-0413-6031).

Peer-Reviewed Publications

- Simoni S., Leoni F., **Veschetti L.**, Malerba G., Carelli M., Lleò M.M., Brenciani A., Morroni G., Giovanetti E., Rocchegiani E., Barchiesi F, Vignaroli C. *The Emerging Nosocomial Pathogen Klebsiella michiganensis: Genetic Analysis of a KPC-3 Producing Strain Isolated from Venus Clam.* Microbiology Spectrum. DOI:10.1128/spectrum.04235-22
- Carelli M., Griggio F., Mingoia M., Garofalo C, Milanovic´ V., Pozzato N, Patuzzo C., Leoni F., **Veschetti L.**, Malerba G., Sandri A., Simoni S., Lleo M.M., Vignaroli C. *Detecting Carbapenemases in Animal and Food Samples by Droplet Digital PCR.* Antibiotics 2022, 11, 1696. DOI: 10.3390/antibiotics11121696.
- **Veschetti L.**, Boaretti M, Saitta G.M., Passarelli Mantovani R, Lleo` M.M., Sandri A., Malerba G. *Achromobacter spp. prevalence and adaptation in cystic fibrosis lung infection.* Microbiological Research Volume 263, October 2022, 127140. DOI: 10.1016/j.micres.2022.127140
- Pomari E., Malerba G., **Veschetti L.**, Franceschi A, Moron Dalla Tor L., Deiana M., Degani M., Mistretta M., Patuzzo C., Ragusa A., Mori A., Bisoffi Z., Buonfrate D. *Identification of miRNAs of Strongyloides stercoralis L1 and iL3 larvae isolated from human stool.* Sci Rep. 2022 Jun 15;12(1):9957. DOI: 10.1038/s41598-022-14185-y PMID: 35705621
- Sandri A.*, **Veschetti L**.*, Saitta G.M., Passarelli Mantovani R., Carelli M., Burlacchini G., Preato S., Sorio C., Melotti P., Montemari A.L., Fiscarelli E.V., Patuzzo C., Signoretto C., Boaretti M., Lleò M.M., Malerba G. *Achromobacter spp. Adaptation in Cystic Fibrosis Infection and Candidate Biomarkers of Antimicrobial Resistance.* International Journal of Molecular Sciences 2022, 23, 9265. DOI: 10.3390/ijms23169265 PMID: 36012535.
- Sandri A., Haagensen J.A.J., **Veschetti L.**, Johansen H.K., Molin S., Malerba G., Signoretto C., Boaretti M., Lleò M.M. *Adaptive Interactions of Achromobacter spp. with Pseudomonas aeruginosa in Cystic Fibrosis Chronic Lung Co-Infection.* Pathogens 2021,10,978. DOI:10.3390/pathogens 10080978 PMID:4451442.
- **Veschetti L.*,** Sandri A.*, Patuzzo C., Melotti P., Malerba G., Lleò M.M. *Genomic Characterization of Achromobacter Species Isolates from Chronic and Occasional Lung Infection in Cystic Fibrosis Patients.* Microbial Genomics 2021;7:000606. DOI: 10.1099/mgen.0.000606 PMID: 34292148.
- **Veschetti L.*,** Sandri A.*, Patuzzo C., Melotti P., Malerba G., Lleò M.M. *Mobilome Analysis of Achromobacter spp. Isolates from Chronic and Occasional Lung Infection in Cystic Fibrosis Patients.* Microorganisms 2021, 9(1), 130. DOI: 10.3390/microorganisms9010130 PMID: 33430044.
- **Veschetti L.*,** Sandri A.*, Johansen H. K., Lleò M.M., Malerba G. *Hypermutation as an Evolutionary Mechanism for Achromobacter xylosoxidans in Cystic Fibrosis Lung Infection.* Pathogens 2020, 9(2), 72. DOI:10.3390/pathogens9020072 PMID: 31973169.
- Zago V., **Veschetti L.,** Patuzzo C., Malerba G., Lleò M.M. *Shewanella algae and Vibrio spp. strains isolated in Italian aquaculture farms are reservoirs of antibiotic resistant genes that might constitute a risk for human health.* Marine Pollution Bulletin 154 (2020) 111057. DOI: 10.1016/j.marpolbul. 2020.111057 PMID: 32174504.
- Zago V., **Veschetti L.,** Patuzzo C., Malerba G., Lleò M.M. *Resistome, Mobilome and Virulome Analysis of Shewanella algae and Vibrio spp. Strains Isolated in Italian Aquaculture Centers.* Microorganisms 2020, 8(4), 572. DOI:10.3390/microorganisms8040572 PMID:32326629