Curriculum vitae Boldrin Francesca

PERSONAL INFORMATION

Francesca Boldrin

4, via A. Grillo 4 Teolo (PD), 35037 Italy

+39 3492528975

francesca.boldrin@unipd.it

Sex: Female

Date of birth: 18/08/1981

Nationality: Italian

Marital Status: married with two children

WORK EXPERIENCE

April 2025-

Associate Professor at Department of Molecular Medicine, University of Padua

December 2022- Mrch 2025

Researcher at Department of Molecular Medicine, University of Padua

May 2020- November 2022

Coordinator of the molecular biology laboratory in RDI (Rete Diagnostica Italiana) Limena.

February 2020- May 2020

Post-doc fellowship for the European project ETBRA (European Tuberculosis Regimen Accelerator).
Laboratory of Prof. Manganelli R. (Molecular Medicine Department, Padua).

Collaboration with Microbiology Unit (Padua Hospital) for SARS- Cov-2 Emergency.

January 2018- December 2019

Molecular Biologist Principal Investigator in the project “Mycobacterial small regulatory RNAs for attenuating virulence of *Mycobacterium tuberculosis*” (Project Code: GR-2016-02364014, Young Research Project Ministero della Salute).

January 2017- December 2018

Principal Investigator in a research project entitled “Functional genomics of stringent response in *Mycobacterium tuberculosis*”.
Laboratory of Prof. Manganelli R. (Molecular Medicine Department, Padua).

October 2016- December 2016

Fellowship in the European Project *“Faster upcoming Technology Uptake Relevant for the Environmental in FOOds Drying”* (Future- Foods).
Laboratory of Prof. Spilimbergo Sara (Dept. Industrial Enginnering, Padua; Laboratory of Prof. Manganelli R. (Molecular Medicine Department, Padua).

- Microbiological analysis of the food before and after a supercritical CO_2 drying procedure in order to optimize this treatment of inactivation for the natural microbiota background or for inoculated pathogenic strains of *Escherichia coli* and *Salmonella* spp.

January 2011- September 2016

Post-doc fellowship for the European project *“More Medicine for Tuberculosis”* (MM4TB)
Laboratory of Prof. Manganelli R. (Molecular Medicine Department, Padua)

- Development of a repressible promoter system in *M. tuberculosis* for the construction of mycobacterial biosensors to be used in drug discovery (target-based whole cell screening for antimicrobial compounds, essential target and vulnerability determination)
- Screening of novel hypothetical antitubercular compounds.
- Study of *M. tuberculosis* metabolism.

January 2009- December 2010

Post-doc fellowship for the European project *“New Medicine for Tuberculosis”* (NM4TB)
Laboratory of Prof. Manganelli R. (Molecular Medicine Department, Padua).

- Development of a repressible promoter system in *M. tuberculosis*.
- Construction of several conditional mutants in *M. tuberculosis*.
- Characterization of conditional mutants.

Research interests

FB main research interests are in the field of **mycobacterial genetics** and **anti-tubercular drug discovery**. She developed several genetic tools to manipulate the mycobacterial genome in order to obtain unmarked deletion mutants (based on Xer- cise technology) and develop mycobacterial conditional mutants for essential drug target validation and characterization. FB developed an innovative repressible promote system (TerR/ Pip OFF) based on the coordinate expression of two repressors which allows precise tuning of mycobacterial genes. This system is currently worldwide used in several

laboratories to validate new essential drug targets and their vulnerability. Recently, FB has obtained a new version of the TetR/Pip OFF system allowing the construction of mycobacterial biosensors aimed at the development of target-based whole cell screening of antitubercular drugs.
During the years in which FB was involved in the NM4TB and MM4TB projects (large collaborative European projects having the goal to develop new antitubercular compounds), she made a decisive contribution to the identification and validation of the targets of several molecules identified in high-throughput screenings run to find antitubercular drugs
FB was PI of a project aimed at studying the mycobacterial stringent response, particularly with a view to its involvement in the occurrence of persisters which survive drug killing. The final task is the identification of new mycobacterial targets for the development of antitubercular compounds able to reduce persisters, therefore decreasing either the antibiotic treatment time or relapse rates. After two years during which FB was coordinator of the molecular biology laboratory in Rete Diagnostica Italiana (Limena, Padova) she's back like Researcher at the Department of Molecular Medicine. Actually FB is involved in the European project ETBRA (European Tuberculosis Regimen Accelerator, started in 2020), a public-private initiative devoted to accelerate the development of new treatment regimens for tuberculosis.

EDUCATION AND TRAINING

June 2025

Participation in the High-Risk Fire Safety Training Course for Emergency Management Personnel: Emergency Team Training and obtained the qualification of Fire Safety Officer

Participation in the First Aid Certification Course and obtained the qualification of First Aid Officer

September 2023

Teaching4 learning Course (Corso New Faculty and Base) (Università di Padova)

February 2022

obtained: Abilitazione Scientifica Nazionale 2021- 2023 (Bando D.D. 589/2021) Settore concorsuale 06/A3 – Microbiologia e Microbiologia clinica (Fascia II)

August 2019

obtained: Abilitazione Scientifica Nazionale 2018- 2020 (Bando D.D. 1532/2016) Settore concorsuale 05/I2 Microbiologia (Fascia II)

September 2019

obtained: Abilitazione Scientifica Nazionale 2018- 2020 (Bando D.D. 1532/2016) Settore concorsuale 06/N1 Scienze delle professioni sanitarie e delle tecnologie mediche applicate (Fascia II)

February 2013

Qualification as a Professional Biologist
(I am admitted to practice as a biologist since 2019; n. AA_085476)

January 2006– December 2008

PhD in Virology and Microbiology (Department of Molecular Medicine of the University of Padua).
PhD thesis title: “Development of an inducible expression system based on Pip and TetR repressors in *Mycobacterium tuberculosis*”.

October 2003- October 2005

Bachelor of Science Degree in Industrial Biotechnologies (University of Padua).
Thesis title: “Global transcriptional response to vancomycin in *Mycobacterium tuberculosis*”
Final Mark: 110/110 cum laude.

September 2000-September 2003

Bachelor’s Degree in Biotechnologies (University of Padua).
Thesis title: “Analysis of poly- hydroxyalkanoates in biodegradable plastic synthesis”.
Final Mark: 95/110.

September 1995- July 2000

Scientific high school degree (Liceo G. Bruno in Venice). Final Mark: 96/100.

PERSONAL SKILLS

Mother tongue: Italian
Other language: English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B1	B2	B2	B1	B1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

COMMUNICATION SKILLS

Good communication skills gained at the regular meetings organized by the Consortium of the European projects around the world (Europa, India), during which FB gave 16 oral presentations.

TECHNICAL SKILLS

Plasmid and genomic DNA extraction and purification, gene cloning, PCR, gel electrophoresis. Site-direct mutagenesis. Bacterial cultures handling (*Escherichia coli, Mycobacterium smegmatis, Mycobacterium tuberculosis*), Gram and Ziehl- Nielsen staining, electrocompetent cells preparation and plasmid transformation, minimal inhibitory concentration (MIC) determination of antibiotics and other compounds for *M. smegmatis* and *M. tuberculosis*. Culturing and manipulation of THP-1 derived macrophages. Heterologous expression and purification of recombinant proteins in *E. coli*, SDS-PAGE, Western-blot, membranes preparation and cell-wall fraction in *M. smegmatis* and *M. tuberculosis*, enzymatic assay, Thin Layer Chromatography (TLC) analysis. DNA microarray technology for global gene expression analyses, (sample preparation and hybridization, data collection and statistical analyses). Sanger sequencing (Applied Biosystems® 3500 Genetic Analyzer), DNA sequencing data analysis.

DIGITAL COMPETENCE

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user

good knowledge of Office suite (word processor, spread sheet, presentation software).
good knowledge of Database (PubMed, NCBI, Blast, Expasy, SAM, GEPAS).

TEACHING ACTIVITIES

2024- 2025. Teaching activity for Master degree in Medicine and Surgery (Microbiology course, 48 hrs).

2024-2025. Teaching activity for School of Specialization in Microbiology and Virology (Genetic course, 10 hrs).

2023-2024. Teaching activity for Master degree in Medicine and Surgery (Microbiology course, 24 hrs).

2022-2023. Teaching activity for Master degree in Medicine and Surgery (Microbiology course, 24 hrs).

2007- 2020. Tutorial activity for students in Microbiology, Biology degree, supervised by Prof. Provvedi Roberta, University of Padua (140 hrs).

2018- 2020. Tutorial activity for students in Microbiology and Laboratory Techniques, Medical Biology degree,supervised by Prof. Provvedi Roberta and Dr. Fallico Loredana (21 hrs).

2005-2006. Correlator for a thesis entitled: "Sviluppo in *Mycobacterium tuberculosis* di un sistema di espressione inducibile utilizzando il regolatore trascrizionale NitR di *Rhodococcus rhodochrous*". (First Level Degree in Molecular Biology, University of Padua).

2008-2009. Correlator for a thesis entitled: "Caratterizzazione dei sistemi tossina-antitossina micobatterici". (Master Degree in Medical Biotechnologies, University of Padua).

2009-2010. Correlator for a thesis entitled: "Sviluppo di una strategia per la stabilizzazione dei plasmidi integrativi, basati sull'integrasi del micobatteriofago L5, sul genoma *di Mycobacterium smegmatis*". (Master Degree in Health Biology, University of Padua).

2012- 2013. Correlator for a thesis entitled:" Analisi della topologia della proteina di membrana LysX di *Mycobacterium tuberculosis*". (First Level Degree in Biology, University of Padua).

2018-2019. Correlator for a thesis entitled:" Validazione del ruolo essenziale del gene *rv2611c* per la crescita in vitro di *Mycobacterium tuberculosis*" (First Level Degree in Biologia, University of Padua).

2024- . PHD Supervisor for One Health Approaches to Infectious Diseases and Life Science Research PhD course (XL Cycle)

MEETINGS AND CONGRESSES

- " 51° Congresso Nazionale della Società Italiana di Microbiologia "
  September 24-27, 2023 Cagliari
  Poster n. 180

- XXXIII SIMGBM (Società Italiana di Microbiologia generale e biotecnologie microbiche)
  June 19- 22 June 2019 Firenze (FI)
  Poster Abstract Book: P86

- FISV (Federazione Italiana Scienze della vita)
  September 26-29, 2007 Riva del Garda (Tn)
  Poster ATTI: D02.06/ PMS.2.P22
  Session: Genetics of microorganism and microbial biotechnologies
  "*Development of a reverse inducible system for conditional expression in Mycobacteria based on Pip- TetR repressors*".
  F. Boldrin, S. Casonato, G. Palù, R. Manganelli
  Dept. of Molecular Medicine, Univ. Padua (Padua)
  email: francesca.boldrin@unipd.it

- Seventh International Conference On The Pathogenesis Of Mycobacterial Infections

June 26-29, 2008 Saltsőbaden, Stockholm, Sweden
Poster Abstract Book P14 pag. 36
"*A reverse inducible system for conditional gene expression in Mycobacteria*".
Francesca Boldrin, Stefano Casonato, Riccardo Manganelli,
University of Padua, Dept of Molecular Medicine, Padua, Italy
email: francesca.boldrin@unipd.it

▪ XXVIII SIMGBM (Società Italiana di Microbiologia generale e biotecnologie microbiche) June 11-13 2009 Spoleto, Italy
Oral Communication:
"*Development of a reverse inducible system for conditional gene expression in mycobacteria based on Pip- TetR repressors*".

▪ 4th Italian experience in biomedical research: young minds at work
November 16-17, 2016 Desenzano del Garda, Verona, Italy
Oral communication:
"*Micrococcin P1- A bactericidal thiopeptide active against Mycobacterium tuberculosis*".

▪ Microbial Stress: From Systems to Molecules and Back
April 23- 25, 2018 Kinsale, Co. Cork, Ireland
Oral communication:
"*Sigma factor- mediated stress response has a major role in Mycobacterium tuberculosis drug tolerance and persistence*"

▪ FB attended to 8 Consortium Meeting (CM) of the European project NM4TB giving 6 oral presentations:

CM1. Åkerblads Hotell & Gästgiveri, Tällberg, Sweden, 24 - 26 June 2008
CM2. Hotel Mercure St Georges, Toulouse, France, 12 - 14 January 2009
CM3. Linnean Society, London, United Kingdom, 22 - 24 June 2009
CM4. Astra Zeneca, Bangalore, India, 8 - 13 December 2009
CM5. Chancellor's Conference Centre, Manchester, United Kingdom, 7 - 9 June 2010
CM6. Schatzalp Hotel, Davos, Switzerland, 16 - 17 February 2011

▪ FB attended to 10 Consortium Meeting (CM) of the European project MM4TB giving 10 oral presentations:

CM1. Hotel Schatzalp, Davos, Switzerland, 18 February 2011(Kick-Off Meeting)
CM2. Green Park Resort, Tirrenia, Tuscany, Italy, 1-2 July 2011
CM3. Hotel Falkensteiner, Bratislava, Slovakia, 12-13 January 2012
CM4. Åkerblads Hotell & Gästgiveri, Tällberg, Sweden, 5-6 July 2012
CM5. Hotel Melia, Zaragoza, Spain, 10-11 January 2013
CM6. Institut Pasteur de Lille, Lille, France, 4-5 July 2013
CM7. Queen's College, University of Cambridge, Cambridge, UK, 6-7 January 2014
CM8. Budapest, Hungary, 30 June - 1 July 2014
CM9. Bilbao, Spain, 8-9 January 2015
CM10. Paris, France, 29 - 30 June 2015

PUBLICATIONS

1. **Provvedi, R.**, **Boldrin, F.**, **Falciani, F., Palù, G., Manganelli, R.** (2009). Global transcriptional response to vancomycin in *Mycobacterium tuberculosis*. *Microbiology*, 155**:** 1093-1102. PMID: 19332811. doi: 10.1099/mic.0.024802-0.

2. **Serafini, A., Boldrin, F., Palù, G., Manganelli, R.** (2009). Characterization of a *Mycobacterium tuberculosis* ESX-3 conditional mutant: essentiality and rescue by Iron and Zinc. *J. Bacteriol*. 191: 6340-6344. PMID: 19684129 doi: 10.1128/JB.00756-09.

3. **Boldrin, F., Casonato, S., Dainese, E., Sala, C., Dhar, N., Palù, G., Riccardi, G., Cole, S.T., Manganelli, R.** (2010). Development of a repressible mycobacterial promoter system based on two transcriptional repressors. *Nucleic Acids Res*. 38: e134. PMID: 20406773. doi: 10.1093/nar/gkq235.

4. **Cascioferro, A., Serafini, A., Boldrin, F., Provvedi, R., Palù, G., Manganelli, R.** (2010). Xer-site-specific recombination: an efficient tool to introduce unmarked deletions in mycobacteria. *Appl. Environ. Microbiol*. 76: 5312-5316. PMID: 20543044. doi: 10.1128/AEM.00382-10.

5. **Ventura, M., Rieck, B., Boldrin, F., Degiacomi, G., Bellinzoni, M., Barilone, N., Alzaidi, F., Alzari, P.M., Manganelli, R., O'Hare, H.M.** (2013). GarA is an essential regulator of metabolism in *Mycobacterium tuberculosis*. *Mol. Microbiol*. 90: 356-66. PMID: 23962235. doi: 10.1111/mmi.12368.

6. **Kolly, G.S., Boldrin, F., Sala, C., Dhar, N., Hartkoorn, R.C., Ventura, M., Serafini, A., McKinney, J.D., Manganelli, R., Cole, S.T.** (2014). Assessing the essentiality of the decaprenyl-phospho-D-arabinofuranose pathway in *Mycobacterium tuberculosis* using conditional mutants. *Mol. Microbiol*. 92: 194-211. PMID: 24517327. doi: 10.1111/mmi.12546.

7. **Boldrin, F., Ventura, M., Ravishankar, S., Sala, C., Svetlikova, Z., Ambady, A., Dhar, N., Kordulakova, J., Degiacomi, G., Zhang, M., Serafini, A., K.G, V.[2], Kolly, G.S., Kumar, N., Palù, G., Guerin, M.E., Mikusova, M., Cole, S.T.,' Manganelli, R.** (2014). The phosphatidyl-myo-inositol mannosyltransferase PimA is essential for *Mycobacterium tuberculosis* growth in vitro and in vivo. *J Bacteriol*. 196: 3441-3451. PMID: 25049093. doi: 10.1128/JB.01346-13.

8. **Mori, G., Chiarelli, L.R., Esposito, M., Makarov, V., Bellinzoni, M., Hartkoorn, R.C., Degiacomi, G., Boldrin, F., Ekins, S., de Jesus Lopes Ribeiro, A.L., Marino, L.B., Centárová, I., Svetlíková, Z., Blaško, J., Kazakova, E., Lepioshkin, A., Barilone, N., Zanoni, G., Porta, A., Fani, R., Baulard, A.R., Mikušová, K., Alzari, P.M., Manganelli, R., de Carvalho, L.P.S., Riccardi, G., Cole, S.T., Pasca, M.R.** (2015). Thiophenecarboxamide derivatives activated by EthA kill *Mycobacterium tuberculosis* by inhibiting the

CTP synthetase PyrG. *Chem Biol* 22: 917-27. PMID: 26097035. doi: 10.1016/j.chembiol.2015.05.016

9. **Tantry, S.J., Degiacomi, G., Sharma, S., Jena, L.K., Narayan, A., Guptha, S., Shanbhag, G., Menasinakai, S., Mallya, M., Awasthy, D., Balakrishnan, G., Kaur, P., Bhattacharjee, D., Narayan, C., Reddy, J., Naveen Kumar, C.N., Shandil, R., Boldrin, F., Ventura, M., Manganelli, R., Hartkoorn, R.C., Cole, S.T., Panda, M., Markad, S.D., Ramachandran, V., Ghorpade, S.R., Dinesh, N.** (2015). Whole cell screen based identification of spiropiperidines with potent antitubercular properties. *Bioorg Med Chem Lett*. 25: 3234-45. PMID: 26087937. doi: 10.1016/j.bmcl.2015.05.087.

10. **Degiacomi, G., Personne, Y., Mondésert, G., Ge, X., Mandava, C.S., Hartkoorn, R.C., Boldrin, F., Goel, P., Peisker, K., Benjak, A., Barrio, M.B., Ventura, M., Brown, A.C., Leblanc, V., Bauer, A., Sanyal, S., Cole, S.T., Lagrange, S., Parish, T., Manganelli, R.** (2016). Micrococcin P1 - A bactericidal thiopeptide active against *Mycobacterium tuberculosis*. *Tuberculosis*, 100: 95-101. PMID: 27553416. doi: 10.1016/j.tube.2016.07.011.

11. **Degiacomi, G., Benjak, A., Madacki, J., Boldrin, F., Provvedi, R., Palù, G., Kordulakova, J., Cole, S.T., Manganelli, R.** (2017). Essentiality of mmpL3 and impact of its silencing on *Mycobacterium tuberculosis* gene expression. *Sci Rep*. 7: 43495. PMID: 28240248. doi: 10.1038/srep43495.

12. **Esposito, M., Szadocka, S., Degiacomi, G., Orena, B.S., Mori, G., Piano, V., Boldrin, F., Zemanová, J., Huszár, S., Barros, D., Ekins, S., Lelièvre, J., Manganelli, R., Mattevi, A., Pasca, M.R., Riccardi, G., Ballell, L., Mikušová, K., Chiarelli, L.R.** (2017). A phenotypic based target screening approach delivers new antitubercular CTP synthetase inhibitors. *ACS Infect. Dis*. 3: 428-437. PMID: 28475832. doi: 10.1021/acsinfecdis.7b00006.

13. **Rieck, B., Degiacomi, G., Zimmermann, M., Cascioferro, A., Boldrin, F., Lazar-Adler, N.R., Bottrill, A.R., le Chevalier, F., Frigui, W., Bellinzoni, M., Lisa, M.N., Alzari, P.M., Nguyen, L., Brosch, R., Sauer, U., Manganelli, R., O'Hare, H.M.** (2017). PknG senses amino acid availability to control metabolism and virulence of *Mycobacterium tuberculosis*. *PLoS Pathog*. 13: e1006399. PMID: 28545104. doi: 10.1371/journal.ppat.1006399.

14. **Rosado, L.A., Wahni, K., Degiacomi, G., Pedre, B., Young, D., de la Rubia G.A., Boldrin, F., Martens, E., Marcos-Pascual, L., Sancho-Vaello, E., Albesa-Jové, D., Provvedi, R., Martin, C., Makarov, V., Versées, W., Verniest, G., Guerin, M.E., Mateos, L.M., Manganelli, R., Messens, J.** (2017). The antibacterial prodrug activator Rv2466c is a mycothiol-dependent reductase in the oxidative stress response of *Mycobacterium tuberculosis*. *J Biol Chem*. 292: 13097-13110. PMID: 28620052. doi: 10.1074/jbc.M117.797837.

15. **Boldrin, F., Degiacomi, G., Serafini, A., Kolly, G. S., Ventura, M., Sala, C., Provvedi, R., Palù, G., Cole, S. T., Manganelli, R.** (2018). Promoter mutagenesis for fine-tuning expression of essential genes in *Mycobacterium tuberculosis*. *Microbial biotechnology*; 11 (1), 238-247. PMID: 29076636. doi: 10.1111/1751-7915.12875.
16. **Pisu, D., Provvedi, R., Espinosa, DM., Payan, JB., Boldrin, F., Palù, G., Hernandez- Pando, R., Manganelli, R.** (2017). The Alternative Sigma Factors SigE and SigB Are Involved in Tolerance and Persistence to Antitubercular Drugs. *Antimicrob Agents Chemother*.; 61 (12): e01596-17. PMID: 28993339. doi: 10.1128/AAC.01596-17.

17. **Boldrin, F., Cioetto Mazzabò, L., Palù, G., Gadreau, L., Manganelli, R., Provvedi, R.** (2019). Assessing the role of Rv1222 (RseA) as an anti-sigma factor of the *Mycobacterium tuberculosis* extracitoplasmic sigma factor SigE. *Scientific reports*; 14; 9(1): 4513. PMID: 30872756. doi: 10.1038/s41598-019-41183-4.

18. **Boldrin, F., Anoosheh, S., Serafini, A., Cioetto Mazzabò, L., Palù, G., Provvedi, R., Manganelli, R.** (2019). Improving the stability of the TetR/Pip-OFF mycobacterial repressible promoter system. *Scientific reports*; 8;9(1):5783. doi: 10.1038/s41598-019-42319-2. PMID: 30962489.

19. **Hernandez Pando R., Shin, SJ., Clark, S., Casonato, S., Zambrano, MB., Kim,H, Boldrin, F., Mata- Espinoza, D., Provvedi, R., Arbues, A., Marquina Castillo, B., Cioetto Mazzabò, L., Barrios Payan, J., Martin, C., Cho, SN., Williams, A., Manganelli, R.** (2019). Construction and characterization of the double unmarked *Mycobacterium tuberculosis* mutant sigE/ fadD26 as a vaccine candidate. *Infect Immun*.; Dec 17; 88(1). PMID: 31591165. doi: 10.1128/IAI.00496-19.

20. **Zambon, A., Bourdoux, S., Pantano, MF., Pugno, NM., Boldrin, F., Hofland, G., Rajkovic, A., Devlieghere F., Spilimbergo, S.** (2019). Supercritical CO2 for the drying and microbial inactivation of apple's slices. *Drying Technology*. PMID: 31591165. doi: 10.1080/07373937.2019.1676774.

21. **Boldrin, F., Provvedi, R., Cioetto Mazzabò, L., Segafreddo, G., Manganelli, R.** (2020). Tolerance and Persistence to Drugs: A Main Challenge in the Fight Against *Mycobacterium tuberculosis*. *Front Microbiol*.; Aug 26; 11:1924. PMID: 32983003. doi: 10.3389/fmicb.2020.01924.

22. **Hsu H., Boudova S., Mvula G., Divala T. H., Rach D., Mungwira R. G., Boldrin, F., Degiacomi G., Manganelli R., Laufer M. K., Cairo, C.** (2021). Age-related changes in PD-1 expression coincide with increased cytotoxic potential

in Vδ2 T cells during infancy. *Cell Immunol*.; Jan; 359:104244. PMID: 33248366. doi: 10.1016/j.cellimm.2020.

23. **Boldrin, F., Anso, I., Alebouyeh, S., Sevilla, I A., Geijo, M., Garrido, JM., Marina, A., Cioetto Mazzabò, L., Segafreddo, G., Guerin, ME., Manganelli, R., Prados-Rosales, R.** (2021). The phosphatidyl-myo-inositol dimannoside acyltransferase PatA is essential for *Mycobacterium tuberculosis* growth in vitro and in vivo. *J Bacteriol*.; Mar 8; 203(7): e00439-20. PMID: 33468587. doi: 10.1128/JB.00439-20.

24. **Boldrin F, Manganelli R. Repressible Promoter System to Study Essential Genes in Mycobacteria.** Methods Mol Biol. 2022;2377:317-332. doi: 10.1007/978-1-0716-1720-5_17. PMID: 34709624.

25. **Boldrin F., Cioetto Mazzabò L, Lanéelle MA, Rindi L, Segafreddo G, Lemassu A, Etienne G, Conflitti M, Daffé M, Garzino Demo A, Manganelli R, Marrakchi H, Provvedi R.** LysX2 is a Mycobacterium tuberculosis membrane protein with an extracytoplasmic MprF-like domain. BMC Microbiol. 2022 Apr 1;22(1):85. doi: 10.1186/s12866-022-02493-2. PMID: 35365094; PMCID: PMC8974105.

26. **Cioetto-Mazzabò L, Boldrin F., Beauvineau C, Speth M, Marina A, Namouchi A, Segafreddo G, Cimino M, Favre-Rochex S, Balasingham S, Trastoy B, Munier-Lehmann H, Griffiths G, Gicquel B, Guerin ME, Manganelli R, Alonso-Rodríguez N**. SigH stress response mediates killing of Mycobacterium tuberculosis by activating nitronaphthofuran prodrugs via induction of Mrx2 expression. *Nucleic Acids Res*. 2023 Jan 11;51(1):144-165. doi: 10.1093/nar/gkac1173. PMID: 36546765; PMCID: PMC9841431.

27. **Manganelli R, Cioetto-Mazzabò L, Segafreddo G, Boldrin F, Sorze D, Conflitti M, Serafini A, Provvedi R**. SigE: A master regulator of Mycobacterium tuberculosis. Front Microbiol. 2023 Mar 7;14:1075143. doi: 10.3389/fmicb.2023.1075143. PMID: 36960291; PMCID: PMC10027907.

28. **Baruzzo G, Serafini A, Finotello F, Sanavia T, Cioetto-Mazzabò L, Boldrin F, Lavezzo E, Barzon L, Toppo S, Provvedi R, Manganelli R, Di Camillo B**. Role of the Extracytoplasmic Function Sigma Factor SigE in the Stringent Response of Mycobacterium tuberculosis. Microbiol Spectr. 2023 Mar 22;11(2): e0294422. doi: 10.1128/spectrum.02944-22. Epub ahead of print. PMID: 36946740; PMCID: PMC10100808.

29. **Hsu H, Zanettini C, Coker M, Boudova S, Rach D, Mvula G, Divala TH, Mungwira RG, Boldrin F, Degiacomi G, Mazzabò LC, Manganelli R, Laufer MK, Zhang Y, Marchionni L, Cairo C**. Concomitant assessment of PD-1 and CD56 expression identifies subsets of resting cord blood Vδ2 T cells with disparate cytotoxic potential. Cell Immunol. 2023 Dec 23;395-396:104797. doi: 10.1016/j.cellimm.2023.104797. Epub ahead of print. PMID: 38157646.

30. **Cioetto-Mazzabò L, Sorze D, Babic F, Boldrin F, Segafreddo G, Provvedi R, Manganelli R**. Structure of the SigE regulatory network in Mycobacterium tuberculosis. Front Microbiol. 2024 May 30;15:1407500. doi: 10.3389/fmicb.2024.1407500. PMID: 38873166; PMCID: PMC11173970.

31. **Araujo MH, Muñoz Sánchez S, Simão TLBV, Nowik N, Antunes SS, Pinto SC, Sorze D, Boldrin F, Manganelli R, Correia Romeiro N, Lasunskaia EB, Verbeek FJ, Spaink HP, Muzitano MF**. Exploring the Antimycobacterial Potential of Podocarpusflavone A from Kielmeyera membranacea: In Vitro and In Vivo Insights. Pharmaceuticals (Basel). 2024 Nov 21;17(12):1560. doi: 10.3390/ph17121560. PMID: 39770402; PMCID: PMC11676425.

32. Rach D, Hsu HT, Nampota-Nkomba N, Mvula G, Mkandawire FA, Nyirenda OM, Hritzo B, Boldrin F, Degiacomi G, Mazzabò LC, Manganelli R, Buchwald AG, Toapanta FR, Sztein MB, Laufer MK, Lyke KE, Cairo C. Cord blood innate-like T cell responses in neonates born to healthy women and women living with HIV. Front Immunol. 2025 Aug 22;16:1628145. doi: 10.3389/fimmu.2025.1628145. PMID: 40918102; PMCID: PMC12412222.

La sottoscritta è a conoscenza che, ai sensi dell'art. 76 del DPR 445/2000, le dichiarazioni mendaci, la falsità negli atti e l'uso di atti falsi sono puniti ai sensi del codice penale e delle leggi speciali e dichiara che le informazioni qui riportate corrispondono a verità. Inoltre, la sottoscritta autorizza al trattamento dei dati personali, secondo quanto previsto dalla Legge 196/03 e s.m.i. e dall'art. 13 del Regolamento Europeo 679/2016 - GDPR.