

PERSONAL INFORMATION

ELENA TAMBURINI



✉ etamburini@unica.it
 🌐 https://web.unica.it/unica/page/en/elena_tamburini
 ORCID ID: 0000-0002-2902-2612
 Scopus Author ID: 36017696100
 Web of Science ID: AGQ-2443-2022
 Loop profile: 338616
 SciProfiles: 453433

CURRENT POSITION

Assistant Professor of Microbiology (GSD 05/BIOS-15 - SSD BIOS-15/A)
 University of Cagliari - Dept. Biomedical Sciences

- Her research activity focuses on environmental microbiology and microbial biotechnologies for sustainable development and circular economy. More specifically, her current research lines deal with the following topics:
 - Study of microbial communities in terrestrial and marine anthropized environments (i.e., ports, mines, aquaculture) and interactions between microorganisms and environmental pollutants (i.e., hydrocarbons, metals, microplastics),
 - development of biotechnological processes employing microorganisms for the restoration, bioremediation, and phytoremediation of ecosystems contaminated by hydrocarbons and/or metals,
 - microbial bioleaching of valuable elements from mining wastes (i.e., mine tailings, red muds),
 - selection and characterization of microorganisms for the production of valuable bioproducts (i.e., surfactants, carotenoids, enzymes).
- For over ten years, she has been providing technical-scientific consultancy and services to private companies operating in the sectors of reclamation and green economy (i.e., landscaping, green building).
- Lecturer of *Microbial biotechnology* in the Biotechnology Bachelor's Degree.
- Lecturer of *Environmental microbiology* in the Marine bio-ecology Master's Degree.
- She is active in Public Engagement through organization, coordination, and participation in initiatives aimed at a non-academic target audience.

EDUCATION

- 2000 **PhD in Genetic Sciences (SSD BIO/19)**
 University of Pavia
"Biological and evolutionary role of bacterial cryptic genes. The bgl operon in Escherichia coli as a model"
 Coordinator Prof. A. Galizzi, Supervisor Prof. G. Mastromei
- 1996 **Degree cum laude in Biological Sciences (curriculum molecular biology)**
 University of Florence
 Experimental thesis *"Origin and evolution of the histidine biosynthetic pathway"*. Supervisor Prof. R. Fani

ACADEMIC POSITIONS

- 2024 - present Member of the Committee of the Dept. Biomedical Sciences
- 2021 - present Member of the Self-Assessment Commission for the Dept. Biomedical Sciences
- 2021 - present Referring person for the Third Mission for the Dept. Biomedical Sciences
- 2021 - present Member of the Communication & Media Commission for the Biology and Pharmacy Faculty
- 2021 - present Member of the International Relations Commission for the Biology Courses
- 2017 - present Member of the Steering Committee for the Biotechnology Bachelor's Degree

- 2006 - 2014 Member of the Self-Assessment Commission of the Industrial Biotechnology Bachelor's Degree
- 2002 - 2006 Lecturer on contract of *Applied Microbiology* in the Industrial Biotechnology Bachelor's Degree, University of Cagliari
- 2001 - 2002 Lecturer on contract of *Microbiology* in the Environmental toxicology Bachelor's Degree, University of Florence
- 2005 - present Member of the Italian Society of General Microbiology and Microbial Biotechnology (SIMGBM)
- Honours and awards Sette Green Awards 2016. *The Italy that knows how to innovate*. She was selected by the *Corriere della Sera* among the top twelve excellence Italian research centres in the Green Economy Business thanks to the innovative results obtained in the BIOLANCLEAN Project of which she was the Principal Investigator.

PUBLICATIONS

She has co-authored 39 articles on ISI journals with peer- review, among which 17 as first author, last author and/or corresponding author (§). She published four abstracts on ISI journals, four book chapters, a patent, 20 articles in congress proceedings, and more than 80 abstracts in conference proceedings, among which more than 60 as first author or last author.

ISI journals

- 2024
1. Siddi, C., Cosentino, S., **Tamburini, E.**, Concas, L., Pisano, M.B., Ardu, R., Deplano, M., Follesa, P., Maciocco, E., Porcu, P., Serra, M., Pisu, M.G. (2024) Parental social isolation during adolescence alters gut microbiome in rat male offspring. *biomolecules* 14, 172. <https://doi.org/10.3390/biom14020172>
 2. Cozzolino, A., Cappai, G., Cara, S., Muñoz, J.A., Milia, S., **Tamburini, E.**, Serpe, A., Carucci, A. (2024) Bioleaching of secondary and critical raw materials from Red Mud by a mixed culture in a semi-continuous reactor. *Hydrometallurgy* 224, 106263. <https://doi.org/10.1016/j.hydromet.2024.106263>
- 2023
3. **Tamburini, E. §**, Mandaresu, M., Lussu, R., Sergi, S., Vitali, F., Carucci, A., Cappai, G. (2023) Metal phytostabilization by mastic shrub (*Pistacia lentiscus* L.) and its root - associated bacteria in different habitats of Sardinian abandoned mining areas (Italy). *Environ. Sci. Pollut. Res.* 30, 122107–122120. <https://doi.org/10.1007/s11356-023-30776-2>
 4. Cozzolino, A., Cappai, G., Cara, S., Milia, S., Ardu, R., **Tamburini, E.**, Carucci, A. (2023) Bioleaching of valuable elements from red mud: a study on the potential of non-enriched biomass. *Minerals* 13, 856. <https://doi.org/10.3390/min13070856>
 5. Mandaresu, M., Dessi, L., Lallai, A., Porceddu, M., Boi, M.E., Bacchetta, G., Pivetta, T., Lussu, R., Ardu, R., Pinna, M., Meloni, F., Sanjust, E., **Tamburini, E. §** (2023) *Helichrysum microphyllum* subsp. *tyrrhenicum*, its root-associated microorganisms, and wood chips represent an integrated green technology for the remediation of petroleum hydrocarbon-contaminated soils. *Agronomy* 13, 812. <https://doi.org/10.3390/agronomy13030812>
- 2022
6. Farci, D., Cocco, E., Tanas, M., Kirkpatrick, J., Maxia, A., **Tamburini, E.**, Schröder, W.P., Piano, D. (2022) Isolation and characterization of a main porin from the outer membrane of *Salinibacter ruber*. *J. Bioenerg. Biomembr.* 54, 273–281. <https://doi.org/10.1007/s10863-022-09950-7>
 7. Puggioni, G., Milia, S., Unali, V., Ardu, R., **Tamburini, E.**, Balaguer, M.D., Pous, N., Carucci, A., Puig, S. (2022) Effect of hydraulic retention time on the electro-bioremediation of nitrate in saline groundwater. *Sci. Total Environ.* 845. <https://doi.org/10.1016/j.scitotenv.2022.157236>
- 2020
8. Rossano, C., Milstein, A., Nuccio, C., **Tamburini, E. §**, Scapini, F. (2020) Variables affecting the plankton network in Mediterranean ports. *Mar. Pollut. Bull.* 158, 111362. <https://doi.org/10.1016/j.marpolbul.2020.111362>
 9. **Tamburini, E. §**, Doni, L., Lussu, R., Meloni, F., Cappai, G., Carucci, A., Casalone, E., Mastromei, G., Vitali, F. (2020) Impacts of anthropogenic pollutants on benthic prokaryotic communities in Mediterranean touristic ports. *Front. Microbiol.* 11, 1–16. <https://doi.org/10.3389/fmicb.2020.01234>
- 2019
10. Vitali, F., Mandalakis, M., Chatzinikolaou, E., Dailianis, T., Senatore, G., Casalone, E., Mastromei, G., Sergi, S., Lussu, R., Arvanitidis, C., **Tamburini, E. §** (2019) Benthic prokaryotic community response to polycyclic aromatic hydrocarbon chronic exposure: importance of emission sources in Mediterranean ports. *Front. Mar. Sci.* 6, 1–13. <https://doi.org/10.3389/fmars.2019.00590>
- 2018
11. Dettori, C.A., Serreli, L., Cuenca Lombraña, A., Fois, M., **Tamburini, E.**, Porceddu, M., Fenu, G., Cogoni, D., Bacchetta, G. (2018) The genetic structure and diversity of *Gentiana lutea* subsp. *lutea* (Gentianaceae) in Sardinia: further insights for its conservation planning. *Caryologia* 71, 489–496. <https://doi.org/10.1080/00087114.2018.1505266>
 12. Civiero, E., Pintus, M., Ruggeri, C., **Tamburini, E.**, Sanjust, E., Zucca, P. (2018) Physiological and phylogenetic characterization of *Rhodotorula diobovata* DSBCA06, a Nitrophilous Yeast. *Biology (Basel)*. 7, 1–13.

- <https://doi.org/10.3390/biology7030039>
- 2017 13. **Tamburini, E.Š**, Sergi, S., Serreli, L., Bacchetta, G., Milia, S., Cappai, G., Carucci, A. (2017) Bioaugmentation-assisted phytostabilisation of abandoned mine sites in South West Sardinia. *Bull. Environ. Contam. Toxicol.* 98, 310–316. <https://doi.org/10.1007/s00128-016-1866-8>
- 2016 14. Melis, V., Manca, M.L., Bullita, E., **Tamburini, E.**, Castangia, I., Cardia, M.C., Valenti, D., Fadda, A.M., Peris, J.E., Manconi, M. (2016) Inhalable polymer-glycosomes as safe and effective carriers for rifampicin delivery to the lungs. *Colloids Surfaces B Biointerfaces* 143, 301–308. <https://doi.org/10.1016/j.colsurfb.2016.03.044>
15. Dettori, C.A., Loi, M.C., Brullo, S., Fraga I Arguimbau, P., **Tamburini, E.**, Bacchetta, G. (2016) The genetic diversity and structure of the *Ferula communis* L. complex (Apiaceae) in the Tyrrhenian area. *Flora Morphol. Distrib. Funct. Ecol. Plants* 223, 138–146. <https://doi.org/10.1016/j.flora.2016.05.007>
- 2015 16. Medas, D., De Giudici, G., Casu, M.A., Musu, E., Gianoncelli, A., Iadecola, A., Meneghini, C., **Tamburini, E.**, Sprocati, A.R., Turnau, K., Lattanzi, P. (2015) Microscopic processes ruling the bioavailability of Zn to roots of *Euphorbia pithyusa* L. Pioneer plant. *Environ. Sci. Technol.* 49, 1400–1408. <https://doi.org/10.1021/es503842w>
17. Beltrani, T., Chiavarini, S., Cicero, D.O., Grimaldi, M., Ruggeri, C., **Tamburini, E.**, Cremisini, C. (2015) Chemical characterization and surface properties of a new bioemulsifier produced by *Pedobacter* sp. strain MCC-Z. *Int. J. Biol. Macromol.* 72, 1090–1096. <https://doi.org/10.1016/j.ijbiomac.2014.10.025>
18. Bacchetta, G., Cappai, G., Carucci, A., **Tamburini, E.** (2015) Use of native plants for the remediation of abandoned mine sites in Mediterranean semiarid environments. *Bull. Environ. Contam. Toxicol.* 94, 326–333. <https://doi.org/10.1007/s00128-015-1467-y>
- 2014 - 1997 19. Dettori, C.A., Sergi, S., **Tamburini, E.**, Bacchetta, G. (2014) The genetic diversity and spatial genetic structure of the Corso-Sardinian endemic *Ferula arrigonii* Bocchieri (Apiaceae). *Plant Biol.* 16, 1005–1013. <https://doi.org/10.1111/plb.12145>
20. Bielenica, A., Kossakowski, J., Struga, M., Dybała, I., La Colla, P., **Tamburini, E.**, Loddo, R. (2011) Biological evaluation of novel 1,4-dithiine derivatives as potential antimicrobial agents. *Med. Chem. Res.* 20, 1411–1420. <https://doi.org/10.1007/s00044-010-9513-0>
21. Di Candilo, M., Bonatti, P.M., Guidetti, C., Focher, B., Grippo, C., **Tamburini, E.**, Mastromei, G. (2010) Effects of selected pectinolytic bacterial strains on water-retching of hemp and fibre properties. *J. Appl. Microbiol.* 108, 194–203. <https://doi.org/10.1111/j.1365-2672.2009.04409.x>
22. Stefańska, J., Bielenica, A., Struga, M., Tyski, S., Kossakowski, J., La Colla, P., **Tamburini, E.**, Loddo, R. (2010) Antimicrobial activity of 10-(diphenylmethylene)-4-azatricyclo[5.2.1.0_{2,6}]dec-8-ene-3,5-dione derivatives. *Ann. Microbiol.* 60, 151–155. <https://doi.org/10.1007/s13213-009-0013-8>
23. Franzetti, A., Caredda, P., Ruggeri, C., Colla, P. La, **Tamburini, E.**, Papacchini, M., Bestetti, G. (2009) Potential applications of surface active compounds by *Gordonia* sp. strain BS29 in soil remediation technologies. *Chemosphere* 75, 801–807. <https://doi.org/10.1016/j.chemosphere.2008.12.052>
24. Ruggeri, C., Franzetti, A., Bestetti, G., Caredda, P., La Colla, P., Pintus, M., Sergi, S., **Tamburini, E.** (2009) Isolation and characterisation of surface active compound-producing bacteria from hydrocarbon-contaminated environments. *Int. Biodeterior. Biodegrad.* 63, 936–942. <https://doi.org/10.1016/j.ibiod.2009.05.003>
25. Franzetti, A., Caredda, P., La Colla, P., Pintus, M., **Tamburini, E.Š**, Papacchini, M., Bestetti, G. (2009) Cultural factors affecting biosurfactant production by *Gordonia* sp. BS29. *Int. Biodeterior. Biodegrad.* 63, 943–947. <https://doi.org/10.1016/j.ibiod.2009.06.001>
26. Franzetti, A., Bestetti, G., Caredda, P., La Colla, P., **Tamburini, E.** (2008) Surface-active compounds and their role in the access to hydrocarbons in *Gordonia* strains. *FEMS Microbiol. Ecol.* 63, 238–248. <https://doi.org/10.1111/j.1574-6941.2007.00406.x>
27. Cao, A., Carucci, A., Lai, T., La Colla, P., **Tamburini, E.** (2007) Effect of biodegradable chelating agents on heavy metals phytoextraction with *Mirabilis jalapa* and on its associated bacteria. *Eur. J. Soil Biol.* 43, 200–206. <https://dx.doi.org/10.1016/j.ejsobi.2007.02.002>
28. Barabesi, C., Galizzi, A., Mastromei, G., Rossi, M., **Tamburini, E.**, Perito, B. (2007) *Bacillus subtilis* gene cluster involved in calcium carbonate biomineralization. *J. Bacteriol.* 189, 228–235. <https://dx.doi.org/10.1128/JB.01450-06>
29. Fanci, R., Pecile, P., Casalone, E., Mengoni, A., **Tamburini, E.**, Guidi, S., Cecconi, D., Bosi, A., Nicoletti, P., Mastromei, G. (2006) *Pseudomonas aeruginosa* sepsis in stem cell transplantation patients. *Infect. Control Hosp. Epidemiol.* 27, 767–770. <https://doi.org/10.1086/504449>
30. Menozzi, G., Merello, L., Fossa, P., Schenone, S., Ranise, A., Mosti, L., Bondavalli, F., Loddo, R., Murgioni, C., Mascia, V., La Colla, P., **Tamburini, E.** (2004) Synthesis, antimicrobial activity and molecular modeling studies of halogenated 4-[1H-imidazol-1-yl(phenyl)methyl]-1,5-diphenyl-1H-pyrazoles. *Bioorg. Med. Chem.* 12,

5465–83. <https://doi.org/10.1016/j.bmc.2004.07.029>

31. **Tamburini, E.**, León, A.G., Perito, B., Di Candilo, M., Mastromei, G. (2004) Exploitation of bacterial pectinolytic strains for improvement of hemp water retting. *Euphytica* 140, 47–54. <https://doi.org/10.1007/s10681-004-4754-y>
32. **Tamburini, E.**, Perito, B., Mastromei, G. (2004) Growth phase-dependent expression of an endoglucanase encoding gene (*egl5*) in *Streptomyces rochei* A2. *FEMS Microbiol. Lett.* 237, 267–272. PMID: 15321672
33. **Tamburini, E.**, León, A.G., Perito, B., Mastromei, G. (2003) Characterization of bacterial pectinolytic strains involved in the water retting process. *Environ. Microbiol.* 5, 730–736. <https://doi.org/10.1046/j.1462-2920.2003.00462.x>
34. **Tamburini, E.**, Daly, S., Steiner, U., Vandini, C., Mastromei, G. (2001) *Clostridium felsineum* and *Clostridium acetobutylicum* are two distinct species that are phylogenetically closely related. *Int. J. Syst. Evol. Microbiol.* 51, 963–966. <https://doi.org/10.1099/00207713-51-3-963>
35. **Tamburini, E.**, Mastromei, G. (2000) Do bacterial cryptic genes really exist? *Res. Microbiol.* 151, 179–182. [https://doi.org/10.1016/S0923-2508\(00\)00137-6](https://doi.org/10.1016/S0923-2508(00)00137-6)
36. Marri, L., Daly, S., Perito, B., **Tamburini, E.**, Mastromei, G. (1999) A putative sigma factor from *Streptomyces* sp. strain A21 can activate the expression of the cryptic operon *bglI* in *Escherichia coli* K-12. *Mol. Gen. Genet.* 261, 201–207. <https://doi.org/10.1007/s004380050958>
37. Fani, R., Gallo, R., Fancelli, S., Mori, E., **Tamburini, E.**, Lazcano, A. (1998) Heterologous gene expression in an *Escherichia coli* population under starvation stress conditions. *J. Mol. Evol.* 47, 363–368. <https://doi.org/10.1007/PL00013149>
38. Fani, R., Mori, E., **Tamburini, E.**, Lazcano, A. (1998) Evolution of the structure and chromosomal distribution of histidine biosynthetic genes. *Orig. Life Evol. Biosph.* 28, 555–570. <https://doi.org/10.1023/A:1006531526299>
39. Fani, R., **Tamburini, E.**, Mori, E., Lazcano, A., Liò, P., Barberio, C., Casalone, E., Cavalieri, D., Perito, B., Polsinelli, M. (1997) Paralogous histidine biosynthetic genes: Evolutionary analysis of the *Saccharomyces cerevisiae* *HIS6* and *HIS7* genes. *Gene* 197, 9–17. [https://doi.org/10.1016/S0378-1119\(97\)00146-7](https://doi.org/10.1016/S0378-1119(97)00146-7)

Abstracts in scientific journals

1. Bullita E., Ruggeri C., Sergi S., Serreli L., Erby G., Nieddu A., Carucci A., **Tamburini E.** (2014) Selection and characterization of indigenous hydrocarbon-degrading bacteria from tourist ports in the Mediterranean Sea Basin, *New Biotechnology*, Volume 31, Supplement, Page S137. <https://doi.org/10.1016/j.nbt.2014.05.1952>
2. Ruggeri C., La Colla P., Bullita E., Sergi S., Vitali F., Mastromei G., **Tamburini E.**, (2014) Characterization of sulphate reducing bacteria communities in sediments from tourist ports in the Mediterranean Sea Basin, *New Biotechnology*, Volume 31, Page S137. <https://doi.org/10.1016/j.nbt.2014.05.1953>
3. Bacchetta G., Berta M., Cappai G., La Colla P., Ruggeri C., **Tamburini E.** (2010) Characterization of bacterial communities associated to plant species from the Sardinian mining district for heavy metal phytoremediation. *Journal of Biotechnology*. 150:S260. <https://doi.org/10.1016/j.jbiotec.2010.09.153>
4. **Tamburini E.**, Pintus M., Ruggeri C., Sergi S., Berta M., Franzetti A., Bestetti G., La Colla P. (2009) Optimisation of emulsifier production by *Gordonia* spp. BS29. *New Biotechnology*. 25S:S77. <https://doi.org/10.1016/j.nbt.2009.06.329>

Book chapters

1. **Tamburini E.**, Mastromei G. (2013) Pectinolytic microorganisms and pectinases. In: Doores S., Salfinger Y., Tortorello M.L. *Compendium of methods for the microbiological examination of foods*. American Public Health Association. pp. 223-228 eISBN: 978-0-87553-022-2. <https://doi.org/10.2105/MBEF.0222.023>
2. Franzetti, A., **Tamburini, E.**, Banat, I.M. (2010). Applications of biological surface active compounds in remediation technologies. In: In Sen R. *Biosurfactants*. Springer Berlin Heidelberg. pp. 121-134. https://doi.org/10.1007/978-1-4419-5979-9_9
3. Barabesi C., **Tamburini E.**, Mastromei G., Perito B. (2003) Mechanisms of microbial calcium carbonate precipitation. In: Art, Biology, and Conservation: Biodeterioration of Works of Art; Koestler R.J., V.R. Koestler, A.E. Charola and F.E. Nieto-Fernandez (eds), *The Metropolitan Museum of Art*, New York, 472-485. ISBN 0-300-10482-0
4. **Tamburini E.**, Di Candilo M., Perito B., Mastromei G. (2002) Selection of bacterial strains for improvement of the hemp retting process. *Advances in Biotechnology for Textile Processing*. Hardin I. R., D. E. Akin and S. J. Wilson (Eds), 129-137. University of Georgia, Athens, USA. ISBN 0-9723620-0-2

Articles in congress proceedings

1. Carucci, A., De Gioannis, G., Muntoni, A., Spiga, D., **Tamburini, E.**, Lussu, R., Iannelli, R., Corda, A., Detotto, C., Bassu, S.J., Statzu, V., Soi, M. (2021) GRRinPORT – Sustainable management of waste and wastewater in ports. (Eds.) Cossu R., Kumpiene J., Stegmann R. *Atti del Sardinia 2021 XVIII International Waste Management and Landfill Symposium*. CISA Publisher - Gruppo EUROWASTE. S. Margherita di Pula (CA), 11-15 Oct 2021. ISBN 9788862650267

2. Ratnikava M.S., Charniauskaya M.I., Bukliarevich H.A., Myamin U.Y., Meloni F., Lussu R., **Tamburini E.**, Akhremchuk A.E., Titok M.A. (2019) *Rhodococcus erythropolis* strain A29-K1 – an effective producer of surface active compounds. Pg. 163-165. International scientific-practical conference “Biotechnology of Microorganisms” dedicated to Professor Yury Fomichov (1929-2015), 27-29 November 2019 Minsk, Belarus, 2019. ISBN 978-985-469-723-9
3. **Tamburini E.**, S. Sergi, E. Bullita, C. Ruggeri, C. Rossano, F. Scapini (2016) Caratterizzazione di batterioplancton e zooplancton in porti turistici del bacino del Mediterraneo. Dati preliminari. Accademia Nazionale Dei Lincei. Atti dei convegni Lincei no. 298. Roma Bardi Edizioni ISSN 0391-805X - ISBN 978-88-218-1124-1.
4. **Tamburini E.**, Sergi S., Cau D., Bacchetta G., Cappai G. and Carucci A. (2015). Bioaugmentation-assisted phytostabilisation of abandoned mine sites in South West Sardinia. Proceedings of the 14th International Conference on Environmental Science and Technology, 3-5 September 2015, Rhodes, Greece. ISSN 1106-5516. ISBN 978-960-7475-52-7
5. **Tamburini E.**, Cappai G., Sergi S., Ruggeri C., Bacchetta G., De Giudici G., Carucci A. (2015) Bioaugmentation-assisted phytostabilisation of abandoned mines by plant-growth promoter *Serratia* sp. Eds.: Kalogerakis N., Fava F., Manousaki E. e-proceedings of the 6th European Bioremediation Conference (ebc-vi 2015). Chania, Crete, Greece Jun. 29 - Jul. 02, 2015. P. 171-174.
6. Frigau N., Rossano C., Nuccio C., Scapini F., Bullita E., Ruggeri C., **Tamburini E.** (2015) Monitoring of plankton community during a field scale bioremediation test in a Tunisian tourist port. Eds.: Kalogerakis N., Fava F., Manousaki E. e-proceedings of the 6th European Bioremediation Conference (ebc-vi 2015). Chania, Crete, Greece Jun. 29 - Jul. 02, 2015. P. 581-585.
7. Bullita E., Frigau N., Ruggeri C., Erby G., Carucci A., **Tamburini E.** (2015) Comparison of diesel degradation by native bacteria from different Mediterranean tourist ports. Eds.: Kalogerakis N., Fava F., Manousaki E. e-proceedings of the 6th European Bioremediation Conference (ebc-vi 2015). Chania, Crete, Greece Jun. 29 - Jul. 02, 2015. P. 590-594.
8. Ruggeri C., Mandalakis M., Sergi S., Bullita E., Frigau N., **Tamburini E.**, Chatzinikolaou E., Dailianis T., Arvanitidis C. (2015) Characterisation of pollution status and hydrocarbon degraders in seawater of Mediterranean tourist ports. Eds.: Kalogerakis N., Fava F., Manousaki E. e-proceedings of the 6th European Bioremediation Conference (ebc-vi 2015). Chania, Crete, Greece Jun. 29 - Jul. 02, 2015. P. 596-600.
9. Erby G., **Tamburini E.**, Ruggeri C., Bullita E., Carucci A. (2015) Bioaugmentation tests for PAH bioremediation in Mediterranean tourist port sediments. Eds.: Kalogerakis N., Fava F., Manousaki E. e-proceedings of the 6th European Bioremediation Conference (ebc-vi 2015). Chania, Crete, Greece Jun. 29 - Jul. 02, 2015. P. 601-605.
10. Erby G., Nieddu A., Piredda M., Ruggeri C., Serrelli L., **Tamburini E.**, Carucci A. (2014) Batch tests for the optimization of PAH bioremediation in Mediterranean tourist port sediments. I2SM2014 4th International Symposium on Sediment Management, Ferrara, 17-19 September 2014. pp. 1-8. ISBN 978-88-916-0733-1
11. Biella R., Bullita E., Cappai G., Erby G., Ruggeri C., Sergi S., Carucci A., **Tamburini E.** (2013). Comparison of PAH degradation by autochthonous microbial communities in sediments of different Mediterranean port areas. In: Daniele Cazzuffi Ilaria Pietrini. RemTech2013 Remediation Technologies, Gestione e bonifica dei Sedimenti, Ferrara, 18-20 settembre, DEA Edizioni, pp. 85-92 (su CD). ISBN 978-88-904428-7-2
12. Bacchetta G., Cappai G., Carucci A., **Tamburini E.** (2013). Use of native plants for the remediation of abandoned mine sites in Mediterranean semiarid environments. Proceedings of CEST 2013, 13th International Conference on Environmental Science and Technology, Athens, Greece, 5-7 September 2013. Ed. T.D. Lekkas. ISSN 1106-5516. ISBN 978-960-7475-51-0
13. Ruggeri C., Franzetti A., Bestetti G., Caredda P., La Colla P., Pintus M., Tedde M.T., **Tamburini E.** (2009) Isolation and screening of surface active compound-producing bacteria on renewable substrates. In Current Research Topics in Applied Microbiology and Microbial Biotechnology. Proceedings of the II International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld2007) Ed. A. Mendez-Vilas World Scientific Publishing Co., 686-690 ISBN 978-981-283-754-7 https://doi.org/10.1142/9789812837554_0142
14. Caredda P., Franzetti A., Papacchini M., La Colla P., Ruggeri C., **Tamburini E.**, Bestetti G. (2009) Applications of surface active compounds by *Gordonia* in bioremediation and washing of hydrocarbon-contaminated soils. In Current Research Topics in Applied Microbiology and Microbial Biotechnology. Proceedings of the II International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld2007) Ed. A. Mendez-Vilas World Scientific Publishing Co., 671-675 ISBN 978-981-283-754-7 https://doi.org/10.1142/9789812837554_0139
15. Caredda P., La Colla P., Pintus M., Ruggeri C., Viola A., **Tamburini E.**, Suardi E., Franzetti A., Bestetti G. (2007) Laboratory tests and bioremediation of a site chronically contaminated by diesel. in: A.R. Gavaskar and C.F. Silver. In Situ and On-Site Bioremediation. Paper C-16 Proceedings of the Ninth International In Situ and On-

Site Bioremediation Symposium (Baltimore, Maryland; May 7–10, 2007). Battelle Press, Columbus, OH. ISBN 978-1-57477-161-9

16. Franzetti A.; Bestetti G.; Caredda P.; **Tamburini E.** (2005) Production of biosurfactants by bacteria belonging to *Gordonia* and *Rhodococcus* genera. Proceedings of 3th European Bioremediation Conference, Chania (Greece) July 4-7 2005 P040:1-4.
17. Caredda P., Sergi S., **Tamburini E.**, Suardi E., Viola A., La Colla P. (2005) Characterization of hydrocarbon-degrading bacteria isolated from an aged contaminated soil. Proceedings of 3th European Bioremediation Conference, Chania (Greece) July 4-7 2005 P044:1-4.
18. Cao A., Carucci A., Lai T., La Colla P., Tamburini E. (2005) Use of biodegradable chelating agents in phytoremediation. Proceedings of 3th European Bioremediation Conference, Chania (Greece) July 4-7 2005 P103:1-4.
19. Ugolini F. C., Arfaioli P., Barabesi C., Bosetto M., Agnelli A., Agnelli A. E., Mastromei G., Perito B., **Tamburini E.** (2002) Study of the impact of organic amendments on treated Italian soils. Proceedings 17th World Congress of Soil Science, Bangkok (Thailand) 12-21 August 2002, 1639,1-10.
20. **Tamburini E.**, Daly S., Marri L., Perito B., Mastromei G. (1999) I geni criptici batterici sono realmente criptici? In: Evoluzione degli animali, evoluzione delle piante, evoluzione dei microrganismi: Strategie a Confronto. 7° Incontro Italiano di Biologia Evoluzionistica, 62-64. CNR, Firenze, 11 -13 Feb. 1999.

Patent

1. La Colla P., **Tamburini E.**, Bestetti G., Franzetti A. Surface active compounds produced by *Gordonia* strains, method of production and use thereof. Publication WO2008037718A1 - 03/04/2008, Application PCT/EP2007/060169 - 25/09/07, Priority RM20006A000506 - 25/09/06.

Non-ISI journals

2. **Tamburini E.**, Ruggeri C., Vitali F., Mastromei G., Frigau N., Bullita E., La Colla P. (2015) Analysis of bacterioplankton community by Illumina sequencing of 16s rRNA genes during a field-scale bioremediation test in a Tunisian tourist port. *Journal of Microbial & Biochemical Technology* 7(4) 65.
3. Frigau N., Bullita E., Carucci A., Erby G., Piras A., Rossano C., Ruggeri C., **Tamburini E.** (2015) Bioremediation and monitoring of seawater for the sustainable management of hydrocarbon pollution in a Tunisian Mediterranean tourist port. *Journal of Microbial and Biochemical Technology* 7(4) 118.
4. **Tamburini E.**, Vitali F., Casalone E., Mastromei G., Ruggeri C., Sergi S., La Colla P. (2015) Spatial variability of microbial communities in sediments from tourist ports of the Mediterranean Sea basin. *Journal of Microbial and Biochemical Technology* 7(4) 116.
5. **Tamburini E.**, Di Candilo M., Perito B., Polsinelli M., Ranalli P., Mastromei G. (2002) Selezione, caratterizzazione ed impiego di ceppi batterici nella macerazione controllata della canapa. *Agroindustria* 1(1):49-53.
6. Mastromei G., Perito B., **Tamburini E.**, Polsinelli M. (2001) Selezione e caratterizzazione di ceppi batterici per il miglioramento del processo di macerazione della canapa. *Industria della carta* 3:119-123.

 ACTION PLANS
AND GUIDELINES

1. GRRinPORT Consortium (2021) Final Publication Product C3.3 Sustainable management of waste and wastewater in ports. Action plans and guidelines (p. 247). <https://interreg-maritime.eu/web/grrinport/chechosarealizzza>
2. GRRinPORT Consortium (2021) Output T2.3 Action plan for the sustainable management of wastewater and accidental oil spills in port waters (p. 45). <https://interreg-maritime.eu/web/grrinport/chechosarealizzza>
3. GRRinPORT Consortium (2021) Product T2.3.2 Pilot action report: accidental spill management area (p. 28). <https://interreg-maritime.eu/web/grrinport/chechosarealizzza>
4. GRRinPORT Consortium (2021) Product T2.4.1 Action plan for the sustainable management of wastewater in ports (p. 18). <https://interreg-maritime.eu/web/grrinport/chechosarealizzza>
5. GRRinPORT Consortium (2021) Output T4.1 Guidelines and georeferenced map for the monitoring of environmental impacts resulting from human interventions in ports (p. 56). <https://interreg-maritime.eu/web/grrinport/chechosarealizzza>
6. GRRinPORT Consortium (2021) Product T4.3.1 Monitoring report, including the identification of environmental critical issues and the assessment of the pilot actions implemented in the target ports (p. 74). <https://interreg-maritime.eu/web/grrinport/chechosarealizzza>
7. MAPMED Consortium (2015) Action Plan for the rational and sustainable management of water, sediments and linked ecosystems: 1) Port of Cagliari - Italy (p. 275), 2) Port of Heraklion - Greece (p. 168); 3) Port of El Kantaoui - Tunisia (p. 184), 4) Porto Marina - Egypt (p. 151).

8. MAPMED Consortium (2015) General guidelines for a rational and sustainable management of water, sediments and linked ecosystems of tourist port areas at Mediterranean Sea basin level (p. 93).
9. MAPMED Consortium (2013) Site characterization reports: 1) Cagliari Port - Sardinia, Italy, (p. 134), 2) Heraklion Port, Crete, Greece (p. 122), 3) El Kantaoui Port, Tunisia (p. 133), 4) Alexandria Port - Egypt (p. 16), 5) Porto Marina - Egypt (pp. 85). Management of Port Areas in the Mediterranean Sea Basin.

EDITORIAL ROLES

- Member of the editorial board of the journal *BIOTECH* for the section *Environmental Biotechnology*
- Editor of the Research topic *Plant Mineral Microbe Interactions* for the journal *Frontiers in Microbiology*
- Guest editor for the special issue *Bioremediation and Management for Sustainable Agriculture* for the journal *Agronomy*
- Reviewer of international journals with impact factor (Publons recent verified revisions).

FUNDING

Oct 2023 - Oct 2025

MICROBEEF

MICROplastic effects on marine Benthic Ecosystems Functioning
<https://prin.unica.it/microbeef/>

Funded by MUR under the National Recovery and Resilience Plan (PNRR) - Mission 4 "Education and Research" - Component 2 "From research to business" - Investment 1.1 "Fund for the National Research Programme and Projects of Relevant National Interest (PRIN)"

Lead Partner: University of Cagliari; Partner: Institute of Marine Sciences CNR-ISMAR

MICROBEEF aims at evaluating the impacts of microplastics on marine benthic microbial communities and sedimentary carbon degradation processes.

Nov 2022 - Oct 2025

e.INS - SPOKE 9

Ecosystem of Innovation for Next generation Sardinia - SPOKE 9 Environment protection and valorisation
<https://www.einssardinia.eu/>

Funded by MUR on NextGenerationEU funds under the National Recovery and Resilience Plan (PNRR) - Mission 4 - Component 2, "From research to business" - Investment 1.5 "Creation and strengthening of Ecosystems of innovation" and construction of "Territorial R&D Leaders"

Spoke Leader: University of Cagliari; Spoke Partner: University of Sassari

eINS is a global programme to strengthen the link between business and science, mitigate the social impacts generated by the crisis and increase the level of territorial inclusion.

Sep 2022 - Sep 2024

MEMBRANE

Microplastics Effects on Microbial Biodiversity ANd Ecosystem functioning: from knowledge to possible solutions
https://web.unica.it/unica/it/ricerca_s05_ss01_sss02_s06.page

Funded by the Foundation of Sardinia under the Agreement with the University of Cagliari

Lead Partner: Dept. of Life and Environmental Sciences; Partner: Dept. Biomedical Sciences

MEMBRANE was a multidisciplinary project including ecologists, microbiologists, physiologists, and biochemists. The project aimed at improving the basic knowledge on the interactions between microplastics and microbiota in two different systems, marine sediments and insect gut, and the eventual roles of microorganisms in plastic degradation in these ecosystems.

Oct 2020 - Oct 2022

S-layer

Analysis of S-layer proteins and their carotenoids: from fundamental research to industrial applications
https://web.unica.it/unica/it/ricerca_s05_ss01_sss02_s04.page

Funded by the Foundation of Sardinia under the Agreement with the University of Cagliari

Lead Partner: Dept. of Life and Environmental Sciences; Partner: Dept. Biomedical Sciences

The project was aimed at improving the understanding of the S layer in Bacteria and Archaea and evaluating bacterial and archaeal strains previously isolated from Sardinian extreme environments as sources of S layer proteins and carotenoids.

Feb 2019 - Dec 2021

SARdNAF

Advanced systems for nitrate removal from groundwater

Funded by Sardinian Autonomous Region under the Development and Cohesion Fund 2014-2020. Pact for the development of the Sardinia Region - Thematic Area 3 - Action Line 3.1 "Interventions to support research"

Lead Partner: UniCa Dept. Civil, Environmental Engineering and Architecture; Partners: UniCa Dept. Biomedical Sciences, Institute of environmental geology and geoenvironmenting CNR IGAG

SARdNAF was aimed at improving the basic knowledge on the application of bio-electrochemical advanced systems for the removal of nitrates from groundwater, identifying the most effective treatment scheme, and

- characterizing the microbial communities involved in the process.
- Jan 2019 - Jan 2022 **BICAP**
<https://www.sgaravattigroup.it/bicap/>
Hydrocarbon bioremediation with natural soil amendments and vascular plants
 Research and Development Project funded by Sardegna Ricerche under the Operational Programme POR FESR Sardegna 2014 - 2020. Axis 1 - Action 1.1.3
 Lead Partner: Green Land Ltd.; Scientific coordination: UniCa Dept. Biomedical Sciences
 The general objective of BICAP was to develop cost efficient and sustainable technologies for landscaping and reclamation of sites chronically contaminated by hydrocarbons using pioneer plant species, wood chips, and microorganisms.
- Apr 2018 - Jun 2021 **GRRinPORT**
Sustainable management of wastes and wastewaters in ports
<https://keep.eu/projects/22586/Sustainable-management-of-w-EN/>
 Funded by EU under the Programme 2014 - 2020 INTERREG V-A Italy - France (Maritime)
 Lead Partner: University of Cagliari (Dept. Civil, Environmental Engineering and Architecture and Dept. Biomedical Sciences); Partners: Sardinian Autonomous Region with the Regional Agency of the Sardinian Hydrographic District, Mediterranean Sea and Coast Foundation, University of Corsica Pasquale Paoli, Transport Office of Corsica, University of Pisa, Italian Institute for Environmental Protection and Research ISPRA
 The general objective of GRRinPORT was to improve the quality of port marine waters by limiting the environmental impacts of port activity and maritime traffic and to define a set of good practices to deal with waste and wastewater for managers and users of port areas of the Programme area (and eventually the entire Mediterranean basin).
- Sep 2014 - Sep 2015 **BIOLANCLEAN**
Innovative products in 100% Sardinian pure virgin wool for the sorption and biodegradation of petroleum hydrocarbons
<https://people.unica.it/liaisonoffice/progetti/progetto-innova-re/>
 Intervention INNOVA.RE - INNOVAzione in REte funded by Sardinian Autonomous Region under the Operational Programme PO FESR Regione Sardegna 2007-2013. Axis VI - Competitiveness 6.2.1a
 Lead Partner: UniCa Dept. Biomedical Sciences; Partner: UniCa Dept. Civil, Environmental Engineering and Architecture, Company: Essedi Ltd.
 The general objective of BIOLANCLEAN was the development of new eco-friendly products based on renewable raw materials for the containment, absorption and remediation of oil spills in aquatic environments and applications in the nautical sector. The project developed innovative hydrocarbon sorbent devices, which were validated for the use at sea according to the official procedures established by the Italian Ministry of the Environment and Protection of Land and Sea.
- Dec 2013 - Jun 2015 **S.ME.RI**
Development of methodologies for the design of bioremediation operations
<https://www.sardegnericerche.it/index.php?xsl=370&s=258395&v=2&c=12089&nc=1&sc=&qf=1&qp=2&fa=1&o=1&t=3>
 Cluster Top-down Programme funded by Sardegna Ricerche under the POR FESR Sardegna 2007-2013 - Activity line 6.1.1.a
 Lead Partner: UniCa Dept. Chemical and Geological Sciences; Partners: UniCa Dept. Biomedical Sciences, ENEA, Jagiellonian University of Krakow
 The project was aimed at transferring technologies and tools for the bioremediation of heavy metal contaminated mining sites to a cluster of private companies.
- Sep 2011 - Oct 2015 **MAPMED**
Management of Port areas in the MEDiterranean Sea Basin
<https://keep.eu/projects/4076/Management-of-Port-areas-in-EN/>
 Funded by EU under the Programme ENPI CBCMED Cross-Border Cooperation in the Mediterranean
 Lead Partner: University of Cagliari (Dept. Civil, Environmental Engineering and Architecture, Dept. Biomedical Sciences, and Dept. Law); Partners: University of Florence, Hellenic Centre for marine research (Greece), Sardinian Autonomous Region with the Regional Agency of the Sardinian Hydrographic District, Faculty of Sciences of Tunis (Tunisia), University of Alexandria (Egypt)
 The project objective was the optimization, validation, and transfer of tools to guide institutional authorities in the sustainable management of tourist ports/harbours with regard to monitoring and reduction of marine pollution through an integrated multidisciplinary approach based on existing cross-thematic innovative scientific, technological, socio-economic and legal skills and know-how.
- Dec 2010 – Dec 2012 **BIOPHYTO**
Integration and optimization of phytoremediation and bioremediation processes of abandoned mining sites

Funded by Sardinian Autonomous Region. Fundamental or basic research projects. L.R.7/2007 "Promotion of scientific research and technological innovation in Sardinia"

Lead Partner: UniCa Dept. Geoengineering and Environmental Technologies; Partners: UniCa Dept. Biomedical Sciences and Technologies, UNICA Dept. Earth Sciences, Biodiversity Conservation Centre

The general objective of BIOPHYTO was the development of innovative biological approaches and tools for the environmental restoration of abandoned mining sites polluted by heavy metals.

Jan 2006 - Apr 2009

Biomedicina

<https://sirio-miur.cineca.it/Gipp/Home/Progetto/Details/12014>

Development of methodologies for the modelling and study of drugs and biopharmaceuticals. Technological laboratories of the district of biomedicine and technologies for health

Partnership: CRS4 LLC, Bio-Ker Ltd, University of Cagliari, Axxam Ltd.

2010 - 2006

ex 60% Projects

Development of cost-efficient production processes of extracellular microbial biopolymers for environmental applications

University of Cagliari, Local research project

Funded by Private Companies

Dec 2022 - Jun 2023

Contract funded by the Foundation IMC - International Marine Centre

The study represented a proof of concept to test the use of bacterial communities as a tool for evaluating the response of the benthic ecosystems to the pressures exerted by classical aquaculture plants and the possible improving effects produced by the integrated multi-trophic aquaculture technology as compared to the classical one.

Sep 2017 - Jun 2023

Contract funded by Saras Ricerche e Tecnologie LLC

The project was aimed at evaluating the applicability of innovative amendments for bioremediation of soils contaminated by weathered hydrocarbons and their effects on the degradation abilities of autochthonous microorganisms.

Apr 2016 - Nov 2021

Contract funded by IVI PETROLIFERA Ltd

The project was aimed at evaluating and monitoring the degradation activity of autochthonous microbial communities during a field scale bioremediation process of soils and groundwaters contaminated by heavy and weathered petroleum hydrocarbons at the ex SIPSA site in Brabau, Torregrande (OR, Italy).

Funds for Young Researchers

2010 - 2012

Study of the microbial biodiversity of Sardinian hypersaline wetlands

Funded by Sardinian Autonomous Region. Grants for young researchers. L.R.7/2007 Promotion of scientific research and technological innovation in Sardinia

Role: Scientific supervisor

2010 - 2012

Genetics of the biosynthesis of bacterial emulsifiers in *Gordonia*

Funded by Sardinian Autonomous Region. Grants for young researchers. L.R.7/2007 Promotion of scientific research and technological innovation in Sardinia

Role: Scientific supervisor

2010 - 2012

Scientific technician and data processing

Funded by Sardinian Autonomous Region in the Programme Master & Back, year 2009

Role: Scientific supervisor

2008 - 2010

Novel microbial surfactants and emulsifiers: isolation, properties and evaluation of feasible applications in the biomedical and environmental sectors

University of Cagliari. Fund for the support of basic research and start-up of young researchers, year 2006

Role: Beneficiary

2001 - 2002

Regulation of the expression of cellulose genes in streptomycetes during the development cycle

University of Florence. Fund for the support of young researchers, year 2000

Role: Beneficiary

SPEAKER AT CONGRESSES AND WORKSHOPS

1. Plenary Session 4 Functional microbial diversity in polluted environments. She held the talk *Benthic microbial response to pollutants in anthropized marine sediments*. Microbiology 2023 XXXIV SIMGBM Congress. Cagliari, Sep. 21-24 2023.
2. International Winter University organized by the Belarus State University. She held the talk *Prokaryotic community response to pollutant exposure in ports and mines*. Online, 19 Jan. 2022 - 04 Feb. 2022.

3. Final meeting of the BICAP project *Hydrocarbon bioremediation with natural soil amendments and vascular plants*. BICAP. Cagliari, 04 Mar. 2022.
4. Final meeting of the GRRinPORT project. She held the talk *Microorganisms in the assessment of port water quality*. Cagliari, 09 Jul. 2021.
5. Webinar Pollution reduction, innovation and circular economy in the Port of Cagliari: the activities of the GRRinPORT Project. He held the talk *Environmental monitoring in the Port of Cagliari: first results and future activities*. Online, 23 Jul. 2020.
6. International Scientific-Practical Conference Biotechnology of Microorganisms dedicated to Professor Yury Fomichov (1929-2015). She held the talk *Impacts of anthropogenic pollutants on benthic bacterial communities in Mediterranean port sediments*. Minsk, Bielorussia, 27 Nov. 2019.
7. BICAP Project Workshop. *Bioremediation from hydrocarbons with natural amendments and vascular plants*. Capoterra (CA), 08 Nov. 2019.
8. Workshop *The GRRinPORT project on Tour!* She held the talk *Remediation of marine waters: the role of microorganisms in hydrocarbon degradation and environmental monitoring*. Livorno, 28 Jun. 2019.
9. Workshop *The GRRinPORT project on Tour!* She held the talk *Remediation of marine waters: the role of microorganisms in the degradation of hydrocarbons and in environmental monitoring*. Cagliari, 14 Jun. 2019.
10. Workshop *The sea as a primary resource for development: from strategy to implementation*. A day of discussion between institutions and stakeholders on issues related to the economy of the sea, organized by the Agency for Territorial Cohesion. She held the talk *Environmental protection as a driver of economic development in tourist ports. The MAPMED Project*. Fiera di Roma, 24 Nov. 2017.
11. IX Anti-pollution Seminar *Caralis 2016* organized by the Italian Navy. She held the talk *Microorganisms in pollution control and sea protection*. Cagliari, 06 Jul. 2016.
12. Final conference of the MAPMED project and Content Transfer Workshop for the transfer of the contents of the MAPMED Guidelines to the Tunisian port authorities. She held the talk *Exploiting bacterioplankton in management of Mediterranean ports*. Blended - Port El Kantaoui (Tunisia), 13-14 Oct. 2015.
13. Organization and co-chair of the BIOLANCLEAN workshop. She held the talk *Field-scale testing of mechanical and biological hydrocarbon removal technologies in the Tunisian port of El Kantaoui*. Cagliari, 22 Sep. 2015.
14. MAPMED Content Transfer Workshop for the transfer of the contents of the MAPMED Guidelines to the Egyptian port authorities. Titles of the talks: 1. *Environmental quality assessment based on water characterization*; 2. *Environmental quality assessment based on sediment characterization*. 3. *Restoration of seawater by hydrocarbon bioremediation treatments using bacterioplankton*. 4. *Water and sediment quality status indicators and targets (Design of an environmental monitoring plan for Porto Marina)*. Alexandria (Egypt), 15 July 2015.
15. MAPMED Content Transfer Workshop for the transfer of the contents of the MAPMED Guidelines to the Greek port authorities. Titles of the talks: 1. *Environmental quality assessment based on water characterization*; 2. *Restoration of seawater by hydrocarbon bioremediation treatments using bacterioplankton*; 3. *Water and sediment quality status indicators and targets (Design of an environmental monitoring plan for Heraklion)*. Heraklion (Greece), 03 July 2015.
16. Tamburini E., Cappai G., Sergi S., Ruggeri C., Bacchetta G., De Giudici G., Carucci A. Oral presentation *Speaker of the intervention Bioaugmentation-assisted phytostabilization of abandoned mines by plant-growth promoter Serratia sp.* at the 6th European Bioremediation Conference. Chania, Crete, Greece 29 June - 02 July 2015.
17. MAPMED Content Transfer Workshop for the transfer of the contents of the MAPMED Guidelines to the Italian port authorities. Titles of the talks: 1. *Environmental quality assessment based on water characterization*; 2. *Environmental quality assessment based on sediment characterization*; 3. *Restoration of seawater by hydrocarbon bioremediation treatments using bacterioplankton*. MAPMED Content Transfer Workshop. Cagliari, 24 June 2015.
18. MAPMED theoretical and practical course on sustainable management of port areas organized by the Faculty of Sciences of Tunis. She carried out training activities on the use of microbiological indicators for the assessment of environmental quality and bioremediation in ports. Port El Kantaoui (Tunisia), 31 May 2015 - 05 June 2015.

19. Tamburini E., La Colla P., Pintus M., Ruggeri C., Caredda P., Franzetti A., Bestetti G. Oral presentation *Emulsifiers produced by Gordonia sp. BS29 as enhancer in remediation of hydrocarbon-contaminated soils and optimisation of cultural composition for production* at the 14th International Biodeterioration and Biodegradation Symposium IBBS-14, Sant'Alessio Siculo (ME), Italy, 06-11 Oct. 2008.
20. Tamburini E., Ruggeri C., La Colla P., Franzetti A., Bestetti G. Oral presentation *Surface-active compounds production and hydrocarbon uptake mechanisms in bacteria belonging to Gordonia genus* at the 8th FISV Conference, Italian Federation of Life Sciences. Riva del Garda (TN), 28 Sep. - 01 Oct. 2006.
21. Tamburini E., Caredda P., Franzetti A., Bestetti G. Oral presentation *Characterization of new Gordonia and Rhodococcus strains producing biosurfactants* at the Bertinoro Meeting of Environmental Microbiology (BMMA 2005). Bertinoro (FC), 13-14 May 2005.
22. Tamburini E., Murgioni C., Mascia V., Caredda P., Cannas M. D., Viola A., La Colla P. Oral presentation *Monitoring and characterization of the bacterial community of a subsoil contaminated by petroleum hydrocarbons during the remediation process* at the Bertinoro Meeting of Environmental Microbiology (BMMA 2004). Bertinoro (FC), 28-29 May 2004.

ACADEMIC TEACHING (SSD BIOS-15/A, former BIO/19)

2024/25	Course <i>Microbial Biotechnology with Laboratory</i> (CFU 5) in the Biotechnology Bachelor's Degree, University of Cagliari
2020/21 - 23/24	Course <i>Microbial Biotechnology with Laboratory</i> (CFU 4) in the Biotechnology Bachelor's Degree, University of Cagliari
2010/11 - present	Course <i>Environmental Microbiology</i> (CFU 5+1) in the Marine Bio-Ecology Master's Degree, University of Cagliari
2006/07 - 2019/20	Course <i>Microbial Biotechnology with Laboratory</i> (CFU 4+3) in the Industrial Biotechnology Bachelor's Degree, University of Cagliari
2008/09 - 2009/10	Laboratory Course <i>Environmental Biotechnology</i> (CFU 4) in the Experimental and Applied Biology Master's Degree, University of Cagliari
2006/07 - 2009/10	Course <i>Environmental Microbiology</i> (CFU 5) in the Marine Biology Master's Degrees, University of Cagliari
2006/07 - 2009/10	Course <i>Environmental Biotechnology</i> (CFU 3) in the Experimental and Applied Biology Master's Degree, University of Cagliari
2004/05 - 2005/06	Lecturer on contract of <i>Applied Biology with Laboratory</i> (CFU 3+3) in the Industrial Biotechnology Bachelor's Degree, University of Cagliari
2002/03 - 2003/04	Lecturer on contract of <i>Applied Microbiology</i> (CFU 3) in the Industrial Biotechnology Bachelor's Degree, University of Cagliari
2001/02	Lecturer on contract of <i>Microbiology</i> in the Environmental Toxicology Bachelor's Degree, University of Florence
PhD Programme, Specialization Schools, Masters	
2024	PhD thesis evaluator for the PhD Course Technologies and Science for Human Health XXXVII cycle, University of Palermo
2023	Member of the evaluation committee of the final exam of the PhD Programme Earth and Environmental Sciences and Technologies XXXV cycle, University of Cagliari.
2023 - present	Co-Supervisor of the PhD student Melinda Mandaresu in the PhD Programme in <i>Earth and Environmental Sciences and Technologies</i> XXXVIII cycle, University of Cagliari.
2022	Member of the evaluation committee of the final exam of the PhD Program Molecular and Translational Medicine XXXIV cycle, University of Cagliari.
2018 - present	Lecturer in the Specialization School of <i>Microbiology and Virology</i> , University of Cagliari.
2018	PhD thesis evaluator for the PhD Programme <i>Molecular and Biomolecular Sciences and Technologies</i> XXIX cycle, University of Palermo
2012 - 2015	Supervisor of the PhD student Enrica Bullita in the PhD Course <i>Development and experimentation of anti-infective compounds</i> XXVIII cycle, University of Cagliari.
2015	Lecturer of General Microbiology in the Specialization School of Clinical Pathology and Biochemistry,

University of Cagliari.

- 2011 - 2015 Lecturer in the PhD Course Development and experimentation of anti-infective compounds XXVII - XXVIII cycles, University of Cagliari.
- 2008 - 2009 Lecturer at the Master Course in Scientific Communication (Module Technology) for the University of Cagliari. She held theoretical lectures on the application of microorganisms in bioremediation.
- 2007 - 2009 Co-Supervisor of the PhD student Manuela Pintus in the PhD Course Genetic Sciences XXII cycle, University of Florence

School -University Transition programmes

- 2024 Lecturer at the practical course *Multidisciplinary approach to scientific research: from cells to animal models* funded by EU under the National Recovery And Resilience Plan (PNRR) in the program dedicated to active orientation in the school-university transition (year 2023/2024). She carried out laboratory activities with high school students on the interactions of microorganisms with plants and animals and their use in bioremediation and phytoremediation. Cagliari Apr. 2024
- 2023 Lecturer at the practical course *Multidisciplinary approach to scientific research* funded by EU under the National Recovery And Resilience Plan (PNRR) in the program dedicated to active orientation in the school-university transition (year 2022/2023). She carried out laboratory activities with high school students on the applications of microorganisms in bioremediation and circular economy. Sanluri and Senorbi Apr. 2023
Lecturer in the Project *Eco-Scienza 2023* in the program Pathways for the development of transferable skills and orientation (PCTO) n.774/2019 MIUR. She held the lecturer *Microbial biotechnology applied to environmental protection* to high school students, Oristano, 01 Mar. 2023
- 2021 Lecturer at the theoretical monographic course *Biology in the 3rd millennium: from DNA to Biotechnology* in the guidance program UNICA_ORIENTA funded by POR FSE Regione Sardegna 2014-2020 - Axis III Education and Training - Action 10.5.1. She held the lecture *Biotechnology and restoration in the marine environment* to high school students. Webinar, 18 Nov. 2021.
Lecturer at the training course *Microbial biotechnology applied to conservation of cultural heritage* aimed at high school teachers. European Biotech Week. Oristano, 01 Oct. 2021.
- 2017 Lecturer at the training course *Experiments and models for biotechnology at school: laboratory course on bacteria and fungi for environmental and industrial applications* aimed at high school teachers. European Biotech Week. Oristano, 27 Sep. 2017.
- 2016 Lecturer at the practical course *I Lincei for novel didactics at school: a national network* aimed at primary and secondary school teachers. Sassari, 10 - 11 Feb. 2016.
- 2013 Lecturer at UNORIENTA 2013. Oristano, 22 Mar. 2013.
- 2012 Lecturer at 5 Salone dell'Orientamento. Oristano, 05 Dec. 2012.
- 2011 Lecturer at the training course ISS. She held the theoretical and practical lectures on environmental microbiology aimed at primary and secondary school teachers. Oristano, 11 Feb. 11 Mar. 2011.
- 2010 - 2011 Lecturer at the Scientific Degree Plan promoted by the Italian Ministry of Education, University and Research. She held the theoretical and practical lectures *Biominalization of carbonate by bacteria and its biotechnological applications* to high school students.
- 2008 Lecturer in the Project *Destination Unica* PON 2000/2006. She held the lecture *Role of microorganisms in remediation* to high school students. La Maddalena (SS), 08 Mar. 2008.

PUBLIC ENGAGEMENT

- 2024 Festival Scienza Cagliari she held the talk *Microrganismi nello sviluppo sostenibile e nella salvaguardia ambientale* aimed at primary and secondary school students and general audience. Cagliari 12 Nov. 2024. https://festivalscienzacagliari.it/eventi_festival/microrganismi-nello-sviluppo-sostenibile-e-nella-salvaguardia-ambientale/
SHARPER European Researchers' Night. She organized and implemented the interactive laboratory *Microorganisms for better or for worse* aimed at general audience. Cagliari, 27 Sep. 2024. <https://www.sharper-night.it/evento/microrganismi-nel-bene-e-nel-male/>
SHARPER European Researchers' Night. She organized the interactive laboratory *Question of cells: many structures, many functions* aimed at general audience. Cagliari, 27 Sep. 2024. <https://www.sharper-night.it/evento/questione-di-cellule-molte-strutture-molte-funzioni/>
- 2023 She collaborated in the organization of the event *Discovering the research of the DISB* as part of the Cagliari

- Science Festival and carried out the interactive laboratory *Microorganisms at work* aimed at general audience. Cagliari, 12 Nov. 2023 https://festivalscienzacagliari.it/eventi_festival/alla-scoperta-della-ricerca-del-disb/
- SHARPER 2020-2023 European Researchers' Night. She carried out the practical demonstration *Microorganisms at work against pollution* aimed at children and teenagers. Cagliari, 29 Set. 2023. <https://archivio.sharper-night.it/evento/gioco-microrganismi-al-lavoro-contro-linquinamento/>
- Conference *The circular economy. A contemporary challenge*. She carried out the practical demonstration *Environmental microorganisms in the circular economy: from strain selection to bioproducts production* aimed at a general audience. Oristano, 10 Jun. 2023.
- 2022 SHARPER 2020-2023 European Researchers' Night. She carried out the creative activity *Let's Colour the Science* to introduce microbial biotechnology to preschool children. Cagliari, 29 Sep. 2022.
- MeetJob 2022 Biotin: from research to enterprise in environmental biotechnology. She held the talk *The role of microorganisms in the methane cycle*. Oristano, 27-28 Apr. 2022. <https://consorziouno.it/notizie/2022/04/meetjob-2022-biotin-dalla-ricerca-allimpresa-nelle-biotecnologie-ambientali/>
- 2021 Talk show #PORTIPULITI 1st episode organized within the GRRinPORT project. 30 Apr. 2021. <https://www.youtube.com/watch?v=npK4LoUGfTg>
- Video #PORTIPULITI Pillole di GRRinPORT. 16 Jun. 2021. <https://youtu.be/ag3YjOm5soo>
- 2019 Unica&Imprese CeSAR OpenDAY organized by CREA UniCa, the University Service Center for Innovation and Entrepreneurship of the University of Cagliari. THEMATIC STAND: Energy and Environment. Monserrato (CA), 27 Jun. 2019.
- 2016 RAI Community Episode 54 Interview on environmental restoration through new biological technologies. 22 Dec. 2016. <https://www.rai.it/dl/RaiTV/programmi/media/ContentItem-876e11d9-f4ad-41c2-806c-04a84a09fedf.html#p=11>
- Interview with the Italian newspaper Corriere della Sera Eliminiamo il petrolio usando lana di pecora. 06 Nov. 2016 <https://sociale.corriere.it/eliminiamo-il-petrolio-usando-lana-di-pecora/>
- RAI Tg Leonardo Interview on the results of the BIOLANCLEAN project. 07 Apr. 2016 <https://www.rai.it/dl/RaiTV/programmi/media/ContentItem-2edd0fde-04a8-41d7-b89b-0757e795d189.html#p=31>
- 2015 Unica&Imprese Researchers of the University of Cagliari introduce themselves to entrepreneurs. She held the talk *Microorganisms in environmental protection and sustainable development*. Cagliari, 05 - 06 Nov. 2015.
- 2014 MeetJob The University meets work. She held the talk *Microbial biotechnologies applied to the sustainable development of ports*. Oristano, 11 Apr. 2014.

WORK EXPERIENCE AND TRAINING COURSES

-
- 2006 - present **Assistant Professor of Microbiology (SSD BIOS-15/A)**
University of Cagliari - Dept. Biomedical Sciences
- 2004 - 2006 **Research collaboration activities (SSD BIO/19)**
University of Cagliari - Dept. Biomedical Sciences and Technologies
- Development of novel potential therapeutic agents with antimicrobial activities.
- 2002 - 2004 **Postdoc Research fellow (SSD BIO/19)**
University of Cagliari - Dept. Biomedical Sciences and Technologies
- In-vitro* evaluation of novel potential therapeutic agents with antimicrobial activities.
- 2000 - 2002 **Postdoc Research fellow (SSD BIO/19)**
University of Florence - Dept. Animal Biology and Genetics
- Development of retting processes for the production of textile fibres based on pectinolytic bacteria.
 - Study of the calcium carbonate bio-mineralization processes for artwork restoration.
 - Study of genes involved in calcium carbonate bio-mineralization in *Bacillus subtilis*.
- 2000 **Qualified as a Professional Biologist**
- 1996 - 1999 **PhD Student (SSD BIO/19)**
PhD Program in Genetic Sciences, University of Pavia. The experimental activity was carried out at the University of Florence in the Dept. Animal Biology and Genetics
- Physiological and molecular characterization of microorganisms for applications in the textile industry.
 - Study of hydrolytic enzymes (i.e., pectinases, cellulases) in environmental bacteria.

1994 - 1996	<ul style="list-style-type: none"> ▪ Regulation of cellulase genes in streptomycetes. <p>Thesis internship University of Florence - Dept. Animal Biology and Genetics</p> <ul style="list-style-type: none"> ▪ Study of the histidine biosynthetic pathway and evolution of metabolic pathways. ▪ Genetic cloning in <i>Escherichia coli</i>
Research visits at National and International Universities and Research Centres	<p>2000 Research activity on the Taxonomy of the bacterial species <i>Clostridium felsineum</i> at the DSMZ German Collection of Microorganisms and Cell Cultures (Braunschweig, Germany) in the laboratory of Prof. Erko Stackebrandt.</p> <p>1998 Research activity for the PhD thesis on the development cycle of streptomycetes at the Dept. Cellular Biology and Development of the University of Palermo in the laboratory of Prof. A. M. Puglia.</p>
Participation in Training Courses	<p>Training course for First Aid Officers organized by Associazione il Volo accredited by the Sardinia Region for safety in the workplace. Cagliari, 29 - 30 Jan. 2024</p> <p>Training course Fire Security Officers organized by Associazione il Volo accredited by the Sardinia Region for safety in the workplace. Cagliari, 04 Oct. 2023</p> <p>Training Course <i>Waste Management and Disposal</i> organized by the University of Cagliari. Cagliari, 17 - 18 May 2022.</p> <p><i>Contamination Bootcamp</i> residential <i>Open Innovation</i> course organized by CREA UniCa, the University Service Center for Innovation and Entrepreneurship of the University of Cagliari. The course aimed at producing solutions to business problems through the meeting, contamination and sharing of experiences between companies, researchers, startups and the financial world. Pula (CA), 18 - 21 Nov. 2021.</p> <p><i>Illumina Next Generation Sequencing: from basic research to future molecular diagnostics</i> organized by Illumina Italy. Monserrato (CA), 27 Mar. 2012.</p> <p><i>The Soil Metagenome: Prospects on Basic and Applied Research</i> organized by the University of Florence. Florence, 08 Jan. 2010.</p> <p><i>The Project Cycle Management: Methodological Course for the Identification of Objectives and Priorities of the Integrated Development Project - Regional PIs</i> organized by FORMEZ. Cagliari, 07 Dec. 2006.</p> <p>Training course for <i>Fire Security Officers (High level of Risk)</i> organized by the Provincial Command of the Fire Brigade of Cagliari. Cagliari 12 Nov. 2006.</p> <p>Training course in <i>Radiation Protection</i> organized by the Radiation Protection Service of the University of Cagliari. Monserrato (CA), 28-29 Jun. 2005.</p> <p>European Summer School <i>Innovative Approaches to the Bioremediation of Contaminated Sites</i>. Faculty of Engineering of the University of Bologna. Bologna, 07-11 Sep. 2004.</p> <p>Training course for the use of the <i>Light-Cycler instrument</i> organized by Applied Science. Cagliari, 08 - 09 Nov. 2004.</p> <p><i>Molecular Microbial Ecology</i> organized by the University of Florence. Florence, 28 June 2001.</p> <p>Gordon research Conference <i>Cellulases & Cellulosomes</i>. Chair Edward A Bayer. Andover, NH USA, 29 Jul. - 03 Aug. 2001.</p> <p><i>Introductory course to Bioinformatics</i> organized by the University of Florence. Florence, May 29, 2000.</p> <p><i>Extrachromosomal Elements: Gene Transfer and Evolution in Microorganisms</i> organized by the PhD Program in Genetics of the University of Pavia and University of Florence and School of Genetics in Cortona. Cortona (AR), 09-10 Apr. 1999.</p> <p><i>Quantitative PCR - State of the Art and New Technologies</i> organized by Pelkin-Elmer Italia, Florence, 18 Nov. 1998</p> <p><i>Molecular Evolution</i> organized by the University of Florence, Florence, 08 Apr. 1998.</p> <p><i>Molecular Evolution</i> organized by the School of Genetics in Cortona of the Italian Genetic Association. Cortona (AR), 11-13 Jun. 1997.</p> <p><i>PCR and other molecular amplification techniques: from advanced to routine</i>. Milan, 04 Apr. 1997.</p> <p>Training Course in <i>Molecular Evolution</i> organized by the National Research Council. Area di ricerca Bari, 02-05 Oct. 1996.</p> <p><i>DNA Analysis '95</i> organized by Pelkin-Elmer Italia. Florence, 15 Nov. 1995.</p> <p><i>Post-Transcriptional Regulation of Gene Expression</i> organized by the School of Genetics in Cortona of the Italian</p>

Genetics Association. Cortona (AR), 19-21 Jun. 1995.

PCR afternoon organized by Pelkin-Elmer Italia. Florence, 09 Mar. 1995.

Theoretical Course on Transcription organized by the School of Genetics in Cortona of the Italian Genetics Association. Cortona (AR), 10-12 Jun. 1993.

Autorizzo il trattamento dei miei dati personali ai sensi del Dlgs 196 del 30 giugno 2003 e dell'art. 13 GDPR.