

## Pietro Tedesco



Born in Maddaloni (CE) on 26/08/1987

e-mail: [pietro.tedesco@szn.it](mailto:pietro.tedesco@szn.it)

Tel: +39 0815833249

Skype: ipietro.tedesco

**Current Position:** Tecnologo III Livello, Technologist

**Current Affiliation:**

Department of Marine Biotechnology, Stazione Zoologica Anton Dohrn, Napoli (Italy)

### Education/Training/Experience

<b>Institute and Location</b>	<b>Degree / Function</b>	<b>Year</b>	<b>Field of Study</b>
University of Naples “Federico II”, Naples, Italy	B.Sc. (Laurea Triennale)	2006- 2009	Industrial and Molecular Biotechnology
University of Naples “Federico II”, Naples, Italy	M.Sc. (Laurea Magistrale)	2010- 2012	Industrial and Molecular Biotechnology
Institute of Protein Biochemistry, CNR, Naples Italy	Research Fellow	2012- 2017	Marine Biotechnology
University of Naples “Federico II”, Naples, Italy	Ph.D	2013- 2016	Biotechnology
INSA-Toulouse Biotech Institute, TBI, (ex LISBP), Toulouse, France	Postdoc	1996- 1999	Industrial Biotechnology
Stazione Zoologica Anton Dohrn, Napoli, Italy	Technologist	2021- present	Marine Biotechnology

### Appointments and awards

2013: Winner of a Short-Term Mobility Fellowship 2013, Progetto PON-CREME, CNR

2014: Winner of a Short-Term Mobility Fellowship 2014, Progetto PON-CREME, CNR

2019: Recipient of a FEMS Meeting Attendance Grant for the Conference GIM 2019, Pisa, Italy

## **Visiting Scientist and participations in sampling expeditions**

2017: Visiting Scientist in the Laboratory of Prof. Marla Trindade at University of The western Cape, Cape Town, South Africa (June 2016 – December 2016). Secondment of the OceanMedicine Project

2015: Participant at the Pharmadeep Expedition in Antarctica. The project was funded by the Eurofleet agency. The activities performed on board were focused on sampling of sub-sea sediments from South Shetland Trench, Antarctica. **8 December 2015 - 2 January 2016**

2015: Participant at the BARKUT expedition in the Barents Sea in collaboration with the University of Tromso on the Helmer Hanssen vessel. The activities performed on board were focused on sampling of sub-sea sediments. **19-25 June 2015**

2014: Visiting PhD Student in the Laboratory of Prof. Marcel Jaspars at University of Aberdeen, Aberdeen, Scotland, UK. Funded by Progetto PON-CREME, CNR

2013: Visiting PhD Student in the Laboratory of Prof. George Tegos at Centre for Molecular Discovery, University of new Mexico, USA. Funded by Progetto PON-CREME, CNR

## **Partecipation in Projects**

- Oligomet Project: Metabolic chassis for versatile production of oligosaccharides (2017-2020) Grant 2016 – French Research Agency – ANR.  
In September 2019 the project has been granted another 18 months of funding to conclude the valorization of the results obtained. Specifically the project received funding from *Société d'Accélération du Transfert de Technologies (SATT)* of Toulouse to consolidate a patent.
- Project. H2020-MSCA-RISE (2015-2019): OceanMedicines. GA n° 690944 Coordinator: Donatella de Pascale
- Progetto Nazionale di Ricerche in Antartide PEA (2014-2016) "Genome scanning and characterization of novel antifreeze proteins for industrial application". Coordinator: Donatella de Pascale
- ProjectEU FP7 KBBE (2012-2016): Pharmasea - Exploring the Hidden Potential of the Oceans grant N\_312184.

## **Students' Supervision**

Supervision of 4 University students during their experimental thesis development for M.Sc, while PhD student and Post-Doc.

## **Patents**

Tedesco P, Durand J, , Potocki-Veronese G, Letisse F.

*Biosynthèse de manno-oligosaccharides par phosphoryse inverse dans des souches modifiées par ingénierie métabolique*

*Biosynthesis of manno-oligosaccharides by reverse phosphorylysis in bacterial strains modified by*

## ***metabolic engineering***

Submitted on 12/05/2020 sous le N° FR2004669.

## **Publications**

Author of 16 publications on ISI-journals (h index:9) and 1 book chapter

### ***List of publications of the last 10 years (2014-present):***

#### **Peer-reviewed publications:**

1. Buonocore C, **Tedesco P**, Vitale GA, Esposito FP, Giugliano R, Monti MC, D'Auria MV, & de Pascale D. (2020). *Characterization of a New Mixture of Mono-Rhamnolipids Produced by Pseudomonas gessardii Isolated from Edmonson Point (Antarctica)*. *Marine drugs*, 18(5), 269. <https://doi.org/10.3390/md18050269>
2. Wang Z, Tauzin AS, Laville E, **Tedesco P**, Létisse F, Terrapon N, Lepercq P, Mercade M, Potocki-Veronese G. *Harvesting of Prebiotic Fructooligosaccharides by Nonbeneficial Human Gut Bacteria* 2020. *mSphere* 5:e00771-19. <https://doi.org/10.1128/mSphere.00771-19>.
3. Parrilli E, **Tedesco P**, Fondi M, Tutino ML, Lo Giudice A, de Pascale D, Fani R. *The art of adapting to extreme environments: The model system Pseudoalteromonas* *Phys Life Rev.* 2019 Apr 4. pii: S1571-0645(19)30066-1. doi: 10.1016/j.pprev.2019.04.003.
4. Tortorella E, **Tedesco P**, Palma Esposito F, January GG, Fani R, Jaspars M, de Pascale D. *Antibiotics from Deep-Sea Microorganisms: Current Discoveries and Perspectives*. *Mar Drugs*. 2018 Sep 29;16(10). pii: E355. doi: 10.3390/md16100355.
5. Corral P, Esposito FP, **Tedesco P**, Falco A, Tortorella E, Tartaglione L, Festa C, D'Auria MV, Gnani G, Varese GC, de Pascale D. *Identification of a Sorbicillinoid-Producing Aspergillus Strain with Antimicrobial Activity Against Staphylococcus aureus: a New Polyextremophilic Marine Fungus from Barents Sea*. *Mar Biotechnol (NY)*. 2018 Apr 12. doi: 10.1007/s10126-018-9821-9.
6. Sannino F, Sansone C, Galasso C, Kildgaard S, **Tedesco P**, Fani R, Marino G, de Pascale D, Ianora A, Parrilli E, Larsen TO, Romano G, Tutino ML. *Pseudoalteromonas haloplanktis TAC125 produces 4-hydroxybenzoic acid that induces pyroptosis in human A459 lung adenocarcinoma cells*. *Sci Rep*. 2018 Jan 19;8(1):1190. doi: 10.1038/s41598-018-19536-2
7. Sannino F, Parrilli E, Apuzzo GA, de Pascale D, **Tedesco P**, Maida I, Perrin E, Fondi M, Fani R, Marino G, Tutino ML. *Pseudoalteromonas haloplanktis produces methylamine, a volatile compound active against Burkholderia cepacia complex strains*. *N Biotechnol*. 2017 Mar 25;35:13-18. doi: 10.1016/j.nbt.2016.10.009
8. Mangiagalli M, Bar-Dolev M, **Tedesco P**, Natalello A, Kaleda A, Brocca S, de Pascale D, Pucciarelli S, Miceli C, Bravslavsky I, Lotti M. *Cryo-protective effect of an ice-binding protein derived from Antarctic bacteria*. *FEBS J*. 2017 Jan;284(1):163-177. doi: 10.1111/febs.13965
9. **Tedesco P**, Di Schiavi, E, Palma Esposito F and de Pascale D. (2016). *Evaluation of Burkholderia cepacia Complex Bacteria Pathogenicity Using Caenorhabditis elegans*. *Bio-protocol* 6(20): e1964.

10. **Tedesco P**, Maida I, Palma Esposito F, Tortorella E, Subko E, Ezeofor CC, Zhang Y, Tabudravu J, Jaspars M, Fani R, de Pascale D. *Antimicrobial Activity of Monoramnholipids Produced by Bacterial Strains Isolated from the Ross Sea (Antarctica)*. *Marine Drugs*. 2016 Apr;14(5). DOI: 10.3390/md14050083.
11. Gnani G, Palma Esposito F, Festa C, Polia A, **Tedesco P**, Fani R, Monti MC, de Pascale D, D'Auria MV, Varese GC. *The antimicrobial potential of algicolous marine fungi to counteract multidrug resistant bacteria: phylogenetic diversity and chemical profiling*. *Res Microbiol*. 2016 May 9.
12. **Tedesco P**, Visone M, Parrilli E, Tutino ML, Perrin E, Maida I, Fani R, Ballestriero F, Santos R, Pinilla C, Di Schiavi E, Tegos G, de Pascale D. *Investigating the Role of the Host Multidrug Resistance Associated Protein Transporter Family in Burkholderia cepacia Complex Pathogenicity Using a Caenorhabditis elegans Infection Model*. *PLoS One*. 2015 Nov 20;10(11):e0142883. doi: 10.1371/journal.pone.0142883. eCollection 2015
13. De Santi C, Ambrosino L, **Tedesco P**, Zhai L, Zhou C, Xue Y, Ma Y, de Pascale D. *Identification and characterization of a novel salt-tolerant esterase from a Tibetan glacier metagenomic library*. *Biotechnol Prog*. 2015 Jul-Aug;31(4):890-9. doi: 10.1002/btpr.2096. Epub 2015 May 15. Erratum in: *Biotechnol Prog*. 2015 Sep-Oct;31(5):1442.
14. Barone R, De Santi C, Palma Esposito F, **Tedesco P**, Galati F, Visone M, Di Scala A, de Pascale D. *Marine metagenomics, a valuable tool for enzymes and bioactive compounds discovery*. *Front Mar Sci*. September 2014 <https://doi.org/10.3389/fmars>
15. De Santi C, **Tedesco P**, Ambrosino L, Altermark B, Willassen NP, de Pascale D. *A new alkaliphilic cold-active esterase from the psychrophilic marine bacterium Rhodococcus sp.: functional and structural studies and biotechnological potential*. *Appl Biochem Biotechnol*. 2014 Mar;172(6):3054-68. doi: 10.1007/s12010-013-0713-1. Epub 2014 Feb 1
16. Izzo V, **Tedesco P**, Notomista E, Pagnotta E, Di Donato A, Trincone A, Tramice A.  *$\alpha$ -rhamnosidase activity in the marine isolate Novosphingobium sp. PPIY and its use in the bioconversion of flavonoids*. *Journal of Molecular Catalysis B: Enzymatic* 105 (2014) 95–103

#### Book Chapter:

1. Haynes MK, Garcia M, Peters R, Waller A, **Tedesco P**, Ursu O, Bologna CG, Santos RG, Pinilla C, Wu TH, Lovchik JA, Oprea TI, Sklar LA, Tegos GP. *High-Throughput Flow Cytometry Screening of Multidrug Efflux Systems*. *Methods Mol Biol*. 2018;1700:293-318. doi: 10.1007/978-1-4939-7454-2\_16.