

Prof. Sonia Melino Ph.D

1992 Master degree in Biology; 1995 Specialization in Biotechnology; 2000 Ph.D in Biochemistry and Molecular Genetics; 2002 Researcher in Biochemistry at University of Rome Tor Vergata; from 2015 -today Associate professor in Biochemistry at University of Rome Tor Vergata. 2017 full Professor habilitation in Biochemistry. Since 2009 she is teaching Biochemistry for both Master Degree in Chemistry and in Material Sciences and Technologies; member of the Teaching Council of the PhD Program in "Biochemistry and Molecular Biology, member of the Spin-off Algarès s.r.l.; in 2016 Founder and member of CIMER-Center of Regenerative Medicine at UTV and member of NAST- Nanoscience & Nanotechnology & Innovative Instrumentation center. Since 2018 she is a member of the Editorial Board of *IJMS*.

For more than 20 years she has been investigating in Biochemistry field on the function and structural characterization of proteins, such as sulfurtransferases and other enzymes of the eukaryotic detoxification system, and of antimicrobial peptides. Currently her research is focused on the effects H₂S-releasing donors on cellular signalling pathways and on the production and optimization of models of 3D-cell culture systems using protein hydrogels for both regenerative stem cell systems and cancer cell systems.

She is a co-author of 90 publications in peer reviewed journals, H index = 33 by Scopus and about 9300 citations.

10 Selected publications

1. **Melino S**, Capo C, Dragani B, Aceto A and Petruzzelli R (1998) A zinc-binding motif conserved in glyoxalase II, beta-lactamase and arylsulfatases. *Trends Biochem Sci* 23, 381-2 (IF =14.26)
2. **Melino S***, Santone C, Di Nardo P and Sarkar B Histatins: salivary peptides with copper(II)- and zinc(II)-binding motifs: Perspectives for biomedical applications. *FEBS J* (2013), 281, 657-72. (IF= 5.6)
3. Mauretti A, Neri A, Kossover O, Seliktar D, Di Nardo P, **Melino S*** Design of a Novel Composite H₂ S- Releasing Hydrogel for Cardiac Tissue Repair. *Macromol Biosci.* (2016).doi: 10.1002/mabi.201500430 (IF=5.85)
4. Ciocci M, Cacciotti I, Seliktar D, **Melino S*** Injectable silk fibroin hydrogels functionalized with microspheres as adult stem cells-carrier systems. *Int. J. Biol. Macromol.* (2018);108:960-971. doi: 10.1016/j.ijbiomac.2017.11.013.Select item 293624793. (IF= 8.025)
5. Cacciotti I, Ciocci M, Di Giovanni E, Nanni F, **Melino S***. Hydrogen Sulfide-Releasing Fibrous Membranes: Potential Patches for Stimulating Human Stem Cells Proliferation and Viability under Oxidative Stress. *Int. J. Mol. Sci.* (2018) Aug 11;19(8): E2368. doi: 10.3390/ijms19082368 (IF= 6.2)
6. Ivanir E., Shachaf Y., Mironi-Harpaz I., Yeheskely-Hayon D., Hazanov L., Harpaz-Segev S., Birman T., Minai L., **Melino S.**, Yelin D. and Seliktar D. A Gel-Based Model of Selective Cell Motility Involving Chemotaxis, Haptotaxis and Durotaxis: Implications for Cell Sorting, Diagnostics and Screening. *Journal Advanced Functional Materials* (2019), Article number 1807106 DOI: 10.1002/adfm.201807106 (IF =19.92)
7. Di Giovanni, E., Buonvino, S., Amelio, I., **Melino, S. *** Glutathione–allylsulfur conjugates as mesenchymal stem cells stimulating agents for potential applications in tissue repair (2020) *International Journal of Molecular Sciences* 21(5),1638 (IF=6.2)
8. Cancelliere, R., Zurlo, F., Micheli, L., **Melino, S.*** Vegetable waste scaffolds for 3D-stem cell proliferating systems and low cost biosensors. *Talanta* (2021) 223,121671

(IF=6.55)

9. Buonvino, S., Ciocci, M., Seliktar, D., **Melino, S***. Photo-polymerization damage protection by hydrogen sulfide donors for 3D-cell culture systems optimization *International Journal Molecular Sciences*, 22(11), 6095 (2021), DOI: 10.3390/ijms22116095 (IF=6.2)
10. Buonvino, S., Ciocci, M., Nanni, F., Cacciotti, I., **Melino, S.*** New vegetable-waste biomaterials by Lupin albus L. as cellular scaffolds for applications in biomedicine and food. *Biomaterials*, 2023, 293, 121984 (IF=15.3)

