



UNIVERSITÀ
DEGLI STUDI
DELL'AQUILA



DISCAB
Dipartimento di Scienze
Cliniche Applicate
e Biotecnologiche

CURRICULUM VITAE

PERSONAL INFORMATION	Name and Surname: Rita Maccarone Department: Biotechnological and Applied Clinical Sciences Address (work): Via Vetoio, Coppito 2, building Angelo Camillo De Meis City: L'Aquila postal code 67100 Nation: Italy E-mail address (work): rita.maccarone@univaq.it
CURRENT POSITION	Associate Professor of Physiology, SSD BIO/09
EDUCATION OTHER QUALIFICATIONS	2004-PhD in Neuroscience, University "La Sapienza" Roma, Italy
ACADEMIC APPOINTMENTS	From 2008 to 2022 Permanent position as Researcher of Physiology, from 2022 to date Associate Professor of Physiology, SSD BIO/09
TEACHING EXPERIENCE	Physiology Teaching: B3B L-2 Biotechnology; D3F L/SNT2 Physiotherapy; D3G L/SNT2 Speech therapy; D3N L/SNT2 Neuro and psychomotor therapy of the developmental age; DM0617 Integrative Neurophysiology. School of specializations: Psychiatry, Ophthalmology, Emergency medicine.
RESEARCH ACTIVITIES	Her research field is focused on the functional study of the visual system and the mechanisms underlying retinal neurodegeneration. In particular, the scientific interest is focused on the degeneration of the neuroretina and retinal pigment epithelium, on the involvement of the retinal vascular system and on the breakdown of the blood retinal barrier. The experimental approach involves in vitro and in vivo studies in order to expand knowledge on the processes that lead to vision loss in human retinal diseases such as age-related macular degeneration with the aim of identifying new therapeutic targets
RESPONSIBILITY IN ACADEMIC ACTIVITIES	Member of departmental Safety and Research committees



<p>EDITORIAL BOARD, EDITORIAL ACTIVITIES, SOCIETY MEMBERSHIP</p>	<p>Peer reviewing: journal <i>Neurochemistry</i>, <i>Food Bioscience</i>, <i>Oxidative Medicine and Cellular Longevity</i>, <i>Experimental Eye Research</i>, <i>Biochemistry and Biophysics Reports</i>, <i>ACS Chemical Neuroscience</i>, <i>Therapeutic Advances in Ophthalmology</i>, <i>international journal of molecular sciences</i>, <i>Advanced therapeutic</i>, <i>journal of hazardous material</i>, <i>Heliyon</i>. Guest editor: <i>Cells</i> journal for the special issue "Molecular Basis of the Macular Degeneration", <i>Antioxidants</i> for the special issue "Oxidative stress and Eye Diseases", <i>International Journal of Molecular sciences</i> for the special issue "Autophagy in Health, Aging and Disease 4.0". Co-author of teaching textbooks: <i>Fisiologia Umana</i> edizioni A.L.E. seconda edizione; <i>Stanfield Fisiologia</i> EdiSES, VI edizione.</p>
<p>SCIENTIFIC ACHIEVEMENTS BIBLIOMETRIC INDICATORS</p>	<p>Scopus Author ID: 23005302400 https://orcid.org/0000-0003-0648-3771 Hirsch (H) Index: 18, i10-Hirsch (H): 27, total number of quotes: 1525, median number of quotes by article: 33</p>
<p>SELECTED PUBLICATIONS</p>	<ol style="list-style-type: none">1. Carozza G, Zerti D, Tisi A, Ciancaglini M, Maccarrone M, Maccarone R. An overview of retinal light damage models for preclinical studies on age-related macular degeneration: identifying molecular hallmarks and therapeutic targets. <i>Rev Neurosci</i>. 2023 Dec 29. doi: 10.1515/revneuro-2023-0130. Epub ahead of print. PMID: 38153807.2. Tisi A, Carozza G, Leuti A, Maccarone R (corresponding author), Maccarrone M. Dysregulation of Resolvin E1 Metabolism and Signaling in a Light-Damage Model of Age-Related Macular Degeneration. <i>Int J Mol Sci</i>. 2023 Apr 4;24(7):6749. doi: 10.3390/ijms24076749. PMID: 37047721; PMCID: PMC10095591.3. Tisi A, Ramekers D, Flati V, Versnel H, Maccarone R. mTOR Signaling in BDNF-Treated Guinea Pigs after Ototoxic Deafening. <i>Biomedicines</i>. 2022 Nov 15;10(11):2935. doi: 10.3390/biomedicines10112935. PMID: 36428503; PMCID: PMC9687683.4. Tisi A, Pulcini F, Carozza G, Mattei V, Flati V, Passacantando M, Antognelli C, Maccarone R (last co-author), Delle Monache S. Antioxidant Properties of Cerium Oxide Nanoparticles Prevent Retinal Neovascular Alterations In Vitro and In Vivo. <i>Antioxidants (Basel)</i>. 2022 Jun 9;11(6):1133. doi: 10.3390/antiox11061133. PMID: 35740031; PMCID: PMC9220105.5. Tisi A., Feligioni M., Passacantando M., Ciancaglini M., Maccarone R. The Impact of Oxidative Stress on Blood-Retinal Barrier Physiology in Age-Related Macular Degeneration. <i>Cells</i>, 2021 Jan 4;10(1):64. doi: 10.3390/cells10010064.6. Tisi A, Flati V, Delle Monache S, Lozzi L, Passacantando M, Maccarone



R. Nanoceria Particles Are an Eligible Candidate to Prevent Age-Related Macular Degeneration by Inhibiting Retinal Pigment Epithelium Cell Death and Autophagy Alterations. Cells. 2020 Jul 4;9(7):E1617. doi: 10.3390/cells9071617.

7. Tisi A, Passacantando M, Lozzi L, **Maccarone R.** Cerium oxide nanoparticles reduce the accumulation of autofluorescent deposits in light-induced retinal degeneration: Insights for age-related macular degeneration Experimental Eye Research Volume 199, October 2020.

8. Tisi A, Parete G, Flati V, **Maccarone R.** Up-regulation of pro-angiogenic pathways and induction of neovascularization by an acute retinal light damage. Sci Rep. 2020 Apr 14;10(1):6376. doi: 10.1038/s41598-020-63449-y.

9. **Maccarone R,** Tisi A, Passacantando M, Ciancaglini M. Ophthalmic Applications of Cerium Oxide Nanoparticles. J Ocul Pharmacol Ther. 2019 Dec 5. doi: 10.1089/jop.2019.0105.

10. Tisi A, Passacantando M, Ciancaglini M, **Maccarone R.** Nanoceria neuroprotective effects in the light-damaged retina: A focus on retinal function and microglia activation. Exp Eye Res. 2019 Sep 11; 188:107797. doi: 10.1016/j.exer.2019.107797. Review.

11. Tisi A, Passacantando M, Lozzi L, Riccitelli S, Bisti S, **Maccarone R.** Retinal long-term neuroprotection by Cerium Oxide nanoparticles after an acute damage induced by high intensity light exposure. Exp Eye Res. 2019 Mar 10; 182:30-38. doi: 10.1016/j.exer.2019.03.003.

13. Maya-Vetencourt JF, Ghezzi D, Antognazza MR, Colombo E, Mete M, Feyen P, Desii A, Buschiazzo A, Di Paolo M, Di Marco S, Ticconi F, Emionite L, Shmal D, Marini C, Donelli I, Freddi G, **Maccarone R,** Bisti S, Sambuceti G, Pertile G, Lanzani G, Benfenati F. A fully organic retinal prosthesis restores vision in a rat model of degenerative blindness. Nature Mater. Jun;16(6):681-689, 2017. doi: 10.1038/nmat4874.

14. **Maccarone R,** Rapino C, Zerti D, di Tommaso M, Battista N, Di Marco S, Bisti S, Maccarrone M. (2016). Modulation of Type-1 and Type-2 Cannabinoid Receptors by Saffron in a Rat Model of Retinal Neurodegeneration. PLOS ONE, ISSN: 1932-6203, 2016. doi: 10.1371/journal.pone.0166827.

PLACE AND DATE L'AQUILA, MARCH 30, 2024