Symposium Title: Exercise, Aging, and Metabolic Health: Decoding Intracellular and Extracellular Redox Signals

SPEAKER 3 Abbreviated CV

Daniela Caporossi is Professor of Experimental Biology at the University of Rome "Foro Italico", Department of Movement, Human and Health Sciences. She is the Chair of the Unit of Biology and Genetics of Human Movement. She graduated from "La Sapienza" University in Rome, followed by post-doc positions in Rome and Hamilton (Canada), a Faculty position in Rome, and Professorship at the "Tor Vergata" University and, lastly, at the "Foro Italico" University, in Rome, where she established a her research group working on the cellular and molecular basis of health-related physical activity. To date, Daniela Caporossi has authored more than 100 peer-reviewed publications with a H-index of 31. Among others, she is a member of the European College of Sport Sciences, where she served as Scientific Committee member from 2003 to 2012, and of the Society of Free Radical Research- Europe, being the current past-President of the society.

SPEAKER 3 Selected Publications

Steady-state redox status in circulating extracellular vesicles: A proof-of-principle study on the role of fitness level and short-term aerobic training in healthy young males. Lisi V, Moulton C, Fantini C, Grazioli E, Guidotti F, Sgrò P, Dimauro I, Capranica L, Parisi A, Di Luigi L, Caporossi D. Free Radic Biol Med. 2023 Aug 1;204:266-275. doi: 10.1016/j.freeradbiomed.2023.05.007.

Plasma-derived extracellular vesicles released after endurance exercise exert cardioprotective activity through the activation of antioxidant pathways.Lisi V, Senesi G, Bertola N, Pecoraro M, Bolis S, Gualerzi A, Picciolini S, Raimondi A, Fantini C, Moretti E, Parisi A, Sgrò P, Di Luigi L, Geiger R, Ravera S, Vassalli G, Caporossi D, Balbi C.Redox Biol. 2023 Jul;63:102737. doi: 10.1016/j.redox.2023.102737.

Online Home-Based Physical Activity Counteracts Changes of Redox-Status Biomarkers and Fitness Profiles during Treatment Programs in Postsurgery Female Breast Cancer Patients. Moulton C, Grazioli E, Antinozzi C, Fantini C, Cerulli C, Murri A, Duranti G, Ceci R, Vulpiani MC, Pellegrini P, Nusca SM, Cavaliere F, Fabbri S, Sgrò P, Di Luigi L, Caporossi D, Parisi A, Dimauro I. Antioxidants (Basel). 2023 May 22;12(5):1138. doi: 10.3390/antiox12051138.

Alpha B-Crystallin in Muscle Disease Prevention: The Role of Physical Activity. Dimauro I, Caporossi D. Molecules. 2022 Feb 8;27(3):1147. doi: 0.3390/molecules27031147. PMID: 35164412 Free PMC article. Review.

The Beneficial Role of Physical Exercise on Anthracyclines Induced Cardiotoxicity in Breast Cancer Patients. Tranchita E, Murri A, Grazioli E, Cerulli C, Emerenziani GP, Ceci R, Caporossi D, Dimauro I, Parisi A. Cancers (Basel). 2022 May 3;14(9):2288. doi: 10.3390/cancers14092288.PMID: 35565417 Free PMC article. Review.

Sex-based differences after a single bout of exercise on PGC1α isoforms in skeletal muscle: A pilot study. D'Amico D, Marino Gammazza A, Macaluso F, Paladino L, Scalia F, Spinoso G, Dimauro I, Caporossi D, Cappello F, Di Felice V, Barone R. FASEB J. 2021 Feb;35(2):e21328. doi: 10.1096/fj.202002173R.PMID: 33433932

Systemic Response of Antioxidants, Heat Shock Proteins, and Inflammatory Biomarkers to Short-Lasting Exercise Training in Healthy Male Subjects. Dimauro I, Grazioli E, Lisi V, Guidotti

F, Fantini C, Antinozzi C, Sgrò P, Antonioni A, Di Luigi L, Capranica L, Caporossi D. Oxid Med Cell Longev. 2021 Nov 22;2021:1938492. doi: 10.1155/2021/1938492. eCollection 2021.PMID: 34853628 Free PMC article.

Exercise, redox homeostasis and the epigenetic landscape. Dimauro I, Paronetto MP, Caporossi D. Redox Biol. 2020 Aug;35:101477. doi: 10.1016/j.redox.2020.101477. Epub 2020 Feb 26.PMID: 32127290

Exercise-mediated downregulation of MALAT1 expression and implications in primary and secondary cancer prevention. Paronetto MP, Dimauro I, Grazioli E, Palombo R, Guidotti F, Fantini C, Sgrò P, De Francesco D, Di Luigi L, Capranica L, Caporossi D. Free Radic Biol Med. 2020 Nov 20;160:28-39. doi: 10.1016/j.freeradbiomed.2020.06.037. Epub 2020 Aug 5.PMID: 32768573

The early response of αB-crystallin to a single bout of aerobic exercise in mouse skeletal muscles depends upon fiber oxidative features. Dimauro I, Antonioni A, Mercatelli N, Grazioli E, Fantini C, Barone R, Macaluso F, Di Felice V, Caporossi D. Redox Biol. 2019 Jun;24:101183. doi: 10.1016/j.redox.2019.101183. Epub 2019 Apr 3.PMID: 30974319