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Academic Role: D3 Graduate Technical Officer - University of Rome "Foro Italico"

Scientific Area: Bio-medical

Scientific Disciplinary Sector(SSD): BIO/13

Education and training

Cristina Fantini is a technical officer-graduate on permanent contract at the Department of Motor, Human and Health Sciences, University of Rome "Foro Italico" and is attached to the Laboratory of Biology and Genetics Unit of Biology, Genetics and Biochemistry. He holds a degree in Biological Sciences from the University of Rome "La Sapienza", and has obtained: the license to practice as a biologist; the title of PhD in "Experimental Pathophysiology" from the University of Rome "Tor Vergata"; the specialization in Clinical Pathology from the University of Rome "La Sapienza"; and the master's degree in Food Science and Applied Dietetics from the Telematic University "UNITELMA" Sapienza.

Main research topics:

Homeostasis of the redox state in both "in vitro" studies on muscle cell models and "in vivo" studies in the response to exercise; study of DNA damage following exhaustive exercise or following over-physiological dosing for short periods of doping hormones; study of the response of certain shock proteins following exercise; study of the expression of ncRNAs after intense exercise.

Work experience

Adjunct lecturer (FISE agreement a.y. 2019-2020 and 2022-2023). Teaching: Biology and General and Human Biochemistry- General and Human Biology and Genetics module (Science in Sport and Exercise Science - class L22);

Exercise and seminar activities of courses of Biology in Science in Sport and Exercise Science - class L22 at University of Rome "Foro Italico";

Adjunct lecturer for the University of Studies Niccolò Cusano - Telematica Roma
Bachelor of Science in Exercise Science - Discipline: Human Biology

Subject tutor for the Bachelor of Science in Exercise and Sport Sciences (**L22**), conducting frontal exercise teaching and tutoring, including distance learning, and serving on examination committees.
Subject tutor for the Master's Degree Program in Preventive and Adapted Motor Activities (**LM67**) conducting tutoring and serving on examination committees.

Publications (2024-2014)

“The impact of physical activity on promoter-specific methylation of genes involved in the redox-status and disease progression: A longitudinal study on post-surgery female breast cancer patients undergoing medical treatment”.

Moulton C, Murri A, Benotti G, Fantini C, Duranti G, Ceci R, Grazioli E, Cerulli C, Sgrò P, Rossi C, Magno S, Di Luigi L, Caporossi D, Parisi A, Dimauro I.

Redox Biol. 2024 Apr;70:103033. doi: 10.1016/j.redox.2024.103033. Epub 2024 Jan 5. PMID: 38211440

“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.PMID: 37238004

“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. Epub 2023 May 18.PMID: 37236143

“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. Epub 2023 May 13.PMID: 37182793

“Vitamin D as a Shield against Aging”.

Fantini C, Corinaldesi C, Lenzi A, Migliaccio S, Crescioli C.

Int J Mol Sci. 2023 Feb 25;24(5):4546. doi: 10.3390/ijms24054546.

PMID: 36901976

“The Prostacyclin Analogue Iloprost Modulates CXCL10 in Systemic Sclerosis”

Colasanti T, Stefanantoni K, Fantini C, Corinaldesi C, Vasile M, Marampon F, Di Luigi L, Antinozzi C, Sgrò P, Lenzi A, Riccieri V, Crescioli C.

Int J Mol Sci. 2022 Sep 5;23(17):10150.

“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.

“AlphaB-crystallin and breast cancer: role and possible therapeutic strategies”.

Caporossi D, Parisi A, Fantini C, Grazioli E, Cerulli C, Dimauro I.

Cell Stress Chaperones. 2021 Jan;26(1):19-28.

“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, Paronetto MP, et al.

Free Radic Biol Med. 2020 Aug 5;160:28-39.

“ α B-crystallin response to a pro-oxidant non-cytotoxic environment in murine cardiac cells: An “in vitro” and “in vivo” study”.

Antonioni A, Dimauro I, Fantini C, Barone R, Macaluso F, Di Felice V, Caporossi D, Antonioni A, et al.
Free Radic Biol Med. 2020 May 20;152:301-312.

“The early response of α B-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

“Redox homeostasis in sport: do athletes really need antioxidant support?”

Antonioni A, Fantini C, Dimauro I, Caporossi D.
Res Sports Med. 2019 Apr-Jun;27(2):147-165

“Telomere length is independently associated with age, oxidative biomarkers, and sport training in skeletal muscle of healthy adult males”.

Magi F, Dimauro I, Margheritini F, Duranti G, Mercatelli N, Fantini C, Ripani FR, Sabatini S, Caporossi D.
Free Radic Res. 2018 Jun;52(6):639-647.

“The p75^{NTR}-mediated effect of nerve growth factor in L6C5 myogenic cells”.

de Perini A, Dimauro I, Duranti G, Fantini C, Mercatelli N, Ceci R, Di Luigi L, Sabatini S, Caporossi D.
BMC Res Notes. 2017 Dec 4;10(1):686.

“Regular exercise participation improves genomic stability in diabetic patients: an exploratory study to analyse telomere length and DNA damage”.

Dimauro I, Sgura A, Pittaluga M, Magi F, Fantini C, Mancinelli R, Sgadari A, Fulle S, Caporossi D.
Sci Rep. 2017 Jun 23;7(1):4137

“Short-term, supra-physiological rhGH administration induces transient DNA damage in peripheral lymphocytes of healthy women”.

Fantini C, Sgrò P, Pittaluga M, de Perini A, Dimauro I, Sartorio A, Caporossi D, Di Luigi L.
J Endocrinol Invest. 2017 Jun;40(6):645-652.

“Resistance training and redox homeostasis: Correlation with age-associated genomic changes”.

Dimauro I, Scalabrin M, Fantini C, Grazioli E, Beltran Valls MR, Mercatelli N, Parisi A, Sabatini S, Di Luigi L, Caporossi D.
Redox Biol. 2016 Dec;10:34-44.

“Exercise at lunchtime: effect on glycemic control and oxidative stress in middle-aged men with type 2 diabetes”.

Haxhi J, Leto G, di Palumbo AS, Sbriccoli P, Guidetti L, Fantini C, Buzzetti R, Caporossi D, Di Luigi L, Sacchetti M.
Eur J Appl Physiol. 2016 Mar;116(3):573-82.

“Platelet-rich plasma and skeletal muscle healing: a molecular analysis of the early phases of the regeneration process in an experimental animal model”.

Dimauro I, Grasso L, Fittipaldi S, Fantini C, Mercatelli N, Racca S, Geuna S, Di Gianfrancesco A, Caporossi D, Pigozzi F, Borriore P.
PLoS One. 2014 Jul 23;9(7):e102993.

Exercise-induced oxidative stress in elderly subjects: the effect of red orange supplementation on the biochemical and cellular response to a single bout of intense physical activity

Pittaluga M, Sgadari A, Tavazzi B, Fantini C, Sabatini S, Ceci R, Amorini AM, Parisi P, Caporossi D.
Free Radic Res. 2013 Mar;47(3):202-11.

“Stem cell activation sustains hereditary hypertrophy in hamster cardiomyopathy”

Fiaccavento R, Carotenuto F, Minieri M, Fantini C, Forte G, Carbone A, Carosella L, Bei R, Masuelli L, Palumbo C, Modesti A, Prat M, Di Nardo P.
J. Pathol. 2005 Feb; 205 (3): 397-407.

“Role of apoptosis in intracranial aneurysm rupture”

Pentimalli L, Modesti A, Vignati A, Marchese E, Albanese A, Di Rocco F, Coletti A, Di Nardo P, Fantini C, Tirpakova B, Maira G.
J. Neurosurg. 2004 Dec;101 (6):1018-25

“ β -Catenin accumulates in intercalated disks of hypertrophic cardiomyopathic hearts”

L. Masuelli, R. Bei, P. Sacchetti, I. Scappaticci, P. Francalanci, L. Albonici, A. Coletti, C. Palumbo, M. Minieri,
R. Fiaccavento, F. Carotenuto, C. Fantini, L. Carosella, A. Modesti, P. Di Nardo.
Card. Res. 2003; Nov 1;60(2):376-87

“Identification of a new missense mutation in the mtDNA of hereditary hypertrophic, but not dilated cardiomyopathic hamsters”

M. Minieri, M. Zingarelli, H. Shubeita, A. Vecchini, L. Binaglia, F. Carotenuto, C. Fantini, R. Fiaccavento, A. Modesti and P. Di Nardo.
Mol.Cell.Bioch. 2003; 252:73-81.

“Selective changes in DNA binding activity of transcription factors in UM-X7.1 cardiomyopathic hamsters”

Ambra R, Di Nardo P, Fantini C, Minieri M, Canali R, Patella F, Virgili F.
Life Sci.2002 Oct 4; 71(20): 2369

“Kinetics of ultraweak light emission from human erythroleukemia K562 cells upon electroporation”

Maccarrone M, Fantini C, Agrò AF, Rosato N.
Biochim Biophys Acta 1998 Nov 11; 1414 (1-2):43-50

“Activation of nitric oxide synthase is involved in tamoxifen-induced apoptosis of human erythroleukemia K562 cells”

Maccarrone M, Fantini C, Ranalli M, Melino G, Agro AF
FEBS Lett 1998 Sep 4;434(3)421-424

“Sister chromatid exchanges and DNA topoisomerase Inhibitors: effect of low concentration of etoposide (VP-16) in ataxia telangectasia lymphoblastoid cell lines”

Fantini C., Vernole P., Tedeschi B. and Caporossi D.
Mutation Research.1998 Jan 13; 412(1):1-7