

GIUSEPPE D'ANTONA, MD, PhD

CURRICULUM vitae et studiorum

Personal details:

Date and place of birth:

26 February 1969, Palermo, Italy

Nationality

Italian

Address:

Department of Molecular Medicine,
University of Pavia
Via Forlanini 6, 27100 Pavia.
Tel: +39 0382-987252
Fax: +39 0382-987664
e-mail: gdantona@unipv.it

Actual position

Aggregate Professor in Physiology at the Faculty of Medicine and Surgery, University of Pavia, Italy

2012-, Head of LUSAMMR (University Laboratory for Sport Therapy in Rare Diseases) at Sport Medicine Centre, Voghera (Pavia), Italy.

Education and Fellowships

- ❖ 1988, *High School*: Liceo Classico di Legnano (Milan, Italy), 56/60.
- ❖ 1996, *MD* University of Pavia (Italy), magna-cum laude.
- ❖ 1996-1998: Visiting Scholar at the Centre for Neuroscience, Flinders University of South Australia.
- ❖ 2000, Invited Visitor at the Centre for Neuroscience, Flinders University of South Australia.
- ❖ 2002, PhD in Physiology, University of Pavia.
- ❖ 2002, Post doctoral position at the Department of Biomedical Science, University of Milano.
- ❖ 2004, Specialization in Sport Medicine, University of Pavia (Italy), magna-cum laude.
- ❖ 2004, Invited visitor at the Program in Gene Function and Expression, University of Massachusetts, (Imo)
- ❖ 2004-, Researcher in Physiology, faculty of Medicine and Surgery, University of Pavia.
- ❖ 2009-, Aggregate Professor in Physiology, faculty of Medicine and Surgery, University of Pavia.

Honors

- ❖ 1999, Young Researchers Award, University of Pavia, with the project "Analysis of motor patterns through spatio-temporal maps".
- ❖ 2003, Young Investigator Award, European Muscle Conference, Montpellier (France).

- ❖ 2003, Doping Control Officer of the Italian Sport Medical Federation (FMSI).
- ❖ 2004, Invited speaker at the PhD course in “Science of Development” (University of Padova).
- ❖ 2004, Invited speaker at the symposium “Ageing Of The Motor System:” From Single Cells To Whole Body Performance” of the 6th World Congress on ageing and physical activity” London (Ontario).
- ❖ 2004, Invited teacher at the “School of Physiology and Biophysics” of the Italian Physiological Society
- ❖ 2005, Designated as Doping Control Officer at the XX Olympic Winter Games in Turin.
- ❖ 2006, Invited speaker at the PhD course in “Veterinarian Sciences” (University of Padua).
- ❖ 2006, Invited speaker at the PhD course in “Genetics and Molecular biology”, University of Rome La Sapienza.
- ❖ 2007, Invited speaker at the 12th Annual Congress of the European College of Sport Science (ECSS), Jyväskylä (Finland)
- ❖ 2007, Invited speaker at King’s College (London), Physiology Seminar Series, sponsored by The Physiological Society
- ❖ 2007, Invited speaker at 11^o Turkish Sport Medicine Congress, Antalya (Turkey)
- ❖ 2008, Invited speaker at Satellite Symposium, “Atrophy and Hypertrophy” at the annual congress of Isokinetic (Bologna)
- ❖ 2008, Invited Chair for poster session [PP-PM04] Physiology 4 at the 13th at the annual Congress of the European College of Sport Science (ECSS), Estoril (Portugal)
- ❖ 2008-, Member of the Scientific Board of the Sport Medicine Centre at Fondazione Maugeri, Pavia Italy.
- ❖ 2008- Member of the Editorial Advisory Board of the European Journal of Applied Physiology
- ❖ 2008, Invited speaker at the Symposium “L’intervento nutrizionale nella riabilitazione della BPCO” c/o Fondazione Maugeri Montescano (Pv).
- ❖ 2009, Invited speaker at the Themed meeting “Human and Exercise Physiology” of the Physiological Society, King’s College (London).
- ❖ 2009-, Member of the Scientific Board of the Sport Medicine Association, Pavia Italy
- ❖ 2009, Invited chair at the symposium “Sport: la dolce medicina” organized by Ordine dei Medici Pavia and Federazione Medico Sportiva Italiana
- ❖ 2009, Invited speaker at the PhD course in “Engineering of the neuromuscular system” (University of Turin, Italy).
- ❖ 2010, Invited speaker at the symposium “Clinical and metabolic effects of a cluster of branched chain amino acids” organized by ADI (Associazione Italiana Dietetica e Nutrizione Clinica) (Torino).
- ❖ 2010, Invited speaker at the special session “Electrical stimulation for testing and training in exercise and sports” International Society of Electromyography and Kinesiology (ISEK) meeting, Aalborg (DK), June 2010.
- ❖ 2010, Invited speaker at the symposium “Fitness cardiometabolico” organized by Ordine dei Medici Pavia and Federazione Medico Sportiva Italiana, Pavia.
- ❖ 2010-, Designated member of the Animal Ethic Committee of the University of Pavia
- ❖ 2010-, Designated vice-Chair of the Animal Ethic Committee of the University of Pavia
- ❖ 2011, Invited speaker at the 2^o national day for facioscapularhumeral dystrophy (FSHD): results and perspectives, October 21, Modena.
- ❖ 2011, Invited speaker at the V National Congress SIRAS, Società Italiana di Riabilitazione ed Alta Specializzazione, December 2, Pavia.
- ❖ 2012, Invited speaker at the international congress: “Advances in nutrition and training in soccer”, October 26, Firenze.
- ❖ 2013, Invited speaker at the national congress: “Anziani: i trucchi per restare giovani” organized by Ordine dei Medici Pavia

- ❖ 2013, Invited speaker at 5th national workshop “Città sane: il diritto alla salute dell’infanzia” organized by Comune di Pavia
- ❖ 2013, Invited Lead Guest Editor for the Special issue “Nutrients and Muscle Disease” in BioMed Research International

Research activity

- ❖ *1996-1997*: role of enteric neurones in shaping the intestinal motor function of small mammals through intracellular and extracellular recordings from enteric neurones and smooth muscle cells and spatio temporal video recordings of gut motility.
- ❖ *1998*: role sex hormones on electrogenesis and oxidative stress of the heart through intracellular recordings from intact rat and mouse preparations.
- ❖ *1998*: acquisition of electrophysiological techniques (sucrose-gap, single unit recording technique) at the Centre of Neuroscience, Flinders University of South Australia.
- ❖ From *1999-2005*, his scientific interests cover different aspects of skeletal and heart muscle physiology. The study is focussed on contractile and biochemical parameters of muscle function in presence of atrophy and muscular dystrophy. He is also devoted to the in vivo and in vitro evaluation of the efficacy of gene therapy and cell therapy of muscular dystrophies.
- ❖ *From 2005-*, his scientific interest is focused on the muscular effects of nutritional supplementations and, in particular, supplementations with amino acids on muscle structure and function in animal models and humans.
- ❖ *From 2012-*, his scientific interest is also focused on the identification of strategies for sport therapy and nutritional supplementation in rare diseases an, in particular, in muscular dystrophies.

Clinical activity

He is currently clinical consultant at:

- Sport Medicine Centre, Voghera, Italy
- Domus Medica, Vigevano, Italy
- Clastmed, Casteggio, Italy

Referee

European Journal of Applied Physiology
 Journal of Applied Physiology
 Journal of Comparative Physiology
 Acta Physiologica
 Thorax
 European Journal of Physiology
 Current Aging Science
 Journal of Physiology
 Journal of Anatomy
 International Journal of Sports Medicine
 Differentiation
 Human Movement Science
 PLOSone
 Scandinavian Journal of Medicine and Science in Sports
 ISRN Nutrition

Editorial Boards

2008- European Journal of Applied Physiology

2011- Open Journal of Molecular and Integrative Physiology
2011- Scienza e Sport
2012- Dataset Papers in Medicine
2012- Scholarly Research Network Nutrition (ISRN Nutrition)
2012- Sport Science for Health
2013- BIOINFO Journal of Proteomics

Societies

Physiological Society
Italian Physiological Society
European Society for Muscle Research
Italian Sport Medical Federation
Italian Obesity Society

Teaching

- ❖ 1998-2004, Teaching Assistant of Human Physiology at the Faculty of Medicine of the University of Pavia and Teaching assistant of Psychobiology at the Faculty of Philosophy of the University of Pavia;
- ❖ 2004-, Regular teacher of Neurophysiology at the Italian Institute of Psychotherapy (IIP, Director Prof. M.T. Bonaccorsi), c/o Foundation Francesco Bonaccorsi, Milan (Italy)
- ❖ 2004-, Regular teacher of Human Physiology at the Faculty of Medicine and Surgery, Course in Sport Sciences, University of Pavia (Italy).
- ❖ 2006- Integrative seminar activity for medical students at the Collegio Borromeo (Pv)
- ❖ 2007-, Regular teacher of Muscle Physiology c/o Specialization School in Sport Medicine, Pavia
- ❖ 2009- Designated member of the college of teachers of the Doctoral course in Physiology and Neuroscience, University of Pavia
- ❖ 2011- Regular teacher of Human Physiology at the School of Medicine, Faculty of Medicine and Surgery, University of Pavia (Italy)
- ❖ 2011- Regular teacher in II level University Master (University of Pavia, Faculty of Pharmacy) titled: Nutraceutical Products

Grant proposals

He has participated to numerous national and international grant proposals (Programs of Relevant National Interest, from 2000); European Community (PENAM 2001-2004; Better Ageing 2002-2005); Italian Space Agency (2001-2003; 2006-2009); Telethon Onlus (2003-2006), Association Française contre les myopathies (2007, 2012).

Grant founded as Principal Investigator

- ❖ 2007, Programs of Relevant National Interest
- ❖ 2009, Programs of Relevant National Interest

Indexed Publications

1. Gualea MR, **D'Antona G**, Ceriani T, Minelli R. *Effects of testosterone on the electrical activity of rat ventricular myocardium*. Med Sci Res 1995; 23: 705-707
2. Brookes SJH, **D'Antona G**, Zagorodnyuk VP, Humphreys CM, and Costa M. Propagating contractions of the circular muscle evoked by slow stretch in flat sheets of guinea-pig ileum. Neurogastroent Motil 2001; 13(6): 519-531
3. **D'Antona G**, Hennig GW, Costa M, Humphreys CM, and Brookes SJH. Neurogenic and myogenic patterns of motor activity in the guinea pig large intestine. Neurogastroent Motil 2001; 13(5): 483-492
4. Pansarasa O, **D'Antona G**, Gualea MR, Pellegrino MA, and Marzatico F. "Oxidative stress": effects of mild endurance training and testosterone treatment on rat gastrocnemius muscle. Eur J Appl Physiol 2002 87: 550-555
5. **D'Antona G**, Mecighian A, Bortolotto S, Pellegrino MA, Staffieri A, Bottinelli R, Reggiani C. Contractile properties and myosin heavy chain isoform composition in single fibre of human laryngeal muscle. J Muscle Res Cell Mot 2002 23: 187-195
6. Zagorodnyuk VP, **D'Antona G**, Brookes SJH and Costa M. Functional GABAB receptors in the guinea-pig nodose ganglion neurones. Auton Neurosci-Basic Clin 2002 102(1-2): 20-29
7. Pellegrino M A, Canepari M, Rossi R, **D'Antona G**, Reggiani C, and Bottinelli R. Orthologous myosin isoforms and scaling of shortening velocity with body size in skeletal muscles fibres of four mammalian species. J Physiol. 2003 546(Pt 3): 677-89
8. Sampaolesi M, Torrente Y, Innocenzi A, Tonlorenzi R, **D'Antona G**, Pellegrino MA, Barresi R, Bresolin N, De Angelis MG, Campbell KP, Bottinelli R, and Cossu G. Cell therapy of a-sarcoglycan null dystrophic mice through intra-arterial delivery of mesoangioblasts. Science 2003 301: 487-492
9. **D'Antona G**, Pellegrino M A, Adami R, Rossi R, Naccari Carlizzi C, Canepari M, Saltin B, and Bottinelli R. The effect of ageing and immobilization on structure and function of skeletal muscle fibres. J Physiol 2003 552: 499-511
10. Pellegrino M A, **D'Antona G**, Bortolotto S, Boschi F, Pastoris O, Bottinelli R, Polla B, and Reggiani C. Clenbuterol antagonizes glucocorticoid-induced atrophy and fibre type transformation in mice. Exp Physiol 2004 89: 89-100
11. Pasini E, Scarabelli T, **D'Antona G**, and Dioguardi FS. The effect of aminoacid mixture on isolated ischemic heart. Am J Cardiol 2004 8(1): 30-34
12. Toniolo L, Patrino M, Maccatrozzo L, Pellegrino MA, Canepari M, Rossi R, **D'Antona G**, Bottinelli R, Reggiani C, and Mascarello F. Fast fibres in a large animal: fibre types, contractile properties and MHC expression in pig skeletal muscle. J Exp Biol 2004 207: 1875-1886
13. Polla B, **D'Antona G**, Bottinelli R, Reggiani C. Respiratory muscle fibres: specialisation and plasticity. Thorax 2004 59: 808-17
14. Torrente Y, Belicchi M, Sampaolesi M, Pisati F, Meregalli M, **D'Antona G**, Tonlorenzi R, Porretti L, Gavina M, Mamchaoui K, Pellegrino MA, Furling D, Mouly V, Butler-Browne GS, Bottinelli R, Cossu G, Bresolin N. Human circulating AC133(+) stem cells restore dystrophin expression and ameliorate function in dystrophic skeletal muscle. J Clin Invest 2004; 114: 182-95
15. Pellegrino M A, Brocca L, Dioguardi FS, Bottinelli R, and **D'Antona G**. Effects of voluntary wheel running and aminoacid supplementation on skeletal muscle of mice. Eur J Appl Physiol 2005; 93(5-6): 655-64.

16. Gabellini D, **D'Antona G**, Moggio M, Prella A, Zecca C, Adami R, Angeletti B, Ciscato P, Pellegrino MA, Bottinelli R, Green MR and Tupler R. Facioscapulohumeral muscular dystrophy in mice overexpressing FRG1. *Nature* 2006; 439: 973-7
17. **D'Antona G**, Lanfranconi F, Pellegrino MA, Brocca L, Adami R, Rossi R, Moro G, Miotti D, Canepari M, Bottinelli R. Skeletal muscle hypertrophy and structure and function of skeletal muscle fibres in male body builders. *J Physiol* 2006; 570: 611-27
18. Denti M, Rosa A, **D'Antona G**, Sthandier O, De Angelis FA, Nicoletti C, Allocca M, Pansarasa O, Parente V, Musarò A, Auricchio A, Bottinelli R and Bozzoni I. Body-wide gene therapy of Duchenne Muscular Dystrophy in the mdx mouse model. *Proc Natl Acad Sci U S A* 2006; 103(10): 3758-63
19. Denti M, Rosa A, **D'Antona G**, Sthandier O, De Angelis FA, Nicoletti C, Allocca M, Pansarasa O, Parente V, Musarò A, Auricchio A, Bottinelli R and Bozzoni I. *Human Gene Therapy* 2006; 17(5): 565-74
20. Sampaolesi M*, Blot S*, **D'Antona G**, Granger N, Tonlorenzi R, Innocenzi A, Mognol P, Thibaud J, Galvez B, Barthélémy I, Perani L, Mantero S, Guttinger M, Pansarasa O, Rinaldi C, Cusella De Angelis MG, Torrente Y, Bordignon C, Bottinelli R and Giulio Cossu G. Rescue of muscular dystrophy pathology by mesoangioblast stem cells in Golden Retriever Dogs leads to preservation of motility. *Nature* 2006 30; 444(7119): 574-9
21. Brunelli S*, Sciorati C*, **D'Antona G**, Innocenzi A, Covarello D, Galvez B, Monopoli A, Sanvito F, Bottinelli R, Ongini E, Cossu G and Clementi E. Oral delivery of the NO-releasing drug HCT 1026 delays progression of muscular dystrophy and increases the efficacy of stem cell therapy. *Proc Natl Acad Sci U S A* 2007; 104(1):264-9
22. **D'Antona G**, Pellegrino MA, Carlizzi CN, and Bottinelli R. Deterioration of contractile properties of muscle fibres in elderly subjects is modulated by the level of physical activity. *Eur J Appl Physiol* 2007; 100(5): 603-11
23. **D'Antona G**, Brocca L, Pansarasa O, Rinaldi C, Tupler R & Bottinelli R. (2007a). Structural and functional alterations of muscle fibres in the novel mouse model of facioscapulohumeral muscular dystrophy. *J Physiol* 2007 584: 997-1009
24. Farini A, Meregalli M, Belicchi M, Battistelli M, Parolini D, **D'Antona G**, Gavina M, Ottoboni L, Constantin G, Bottinelli R, and Torrente Y T- and B-lymphocytes depletion has a great effect on the fibrosis of the dystrophic skeletal muscles in the scid/mdx mouse. *J Pathol* 2007;**213**(2):229-38.
25. Y. Torrente, M. Belicchi, C. Marchesi, **G. D'Antona**, F. Cojamagnan, F. Pisati, M. Gavina, R. Tonlorenzi, ¹G. Fagiolari, C. Lamperti, R. Giordano, L. Porretti, R. Lopa, M. Sampaolesi, M. Guglieri, L. Vicentini, N. Grimoldi, F. Tiberio, V. Songa, P. Baratta, A. Prella, L. Forsenigo, O. Pansarasa, C. Rinaldi, V. Mouly, G.S. Butler-Browne, GP. Comi, P. Biondetti, M. Moggio, S. Gaini, N. Stocchetti, A. Priori, MG. D'Angelo, A. Turconi, R. Bottinelli, G. Cossu, P. Rebullà, N. Bresolin. Autologous transplantation of AC133+ stem cells in Duchenne muscular dystrophy: preclinical and clinical evidences. *Cell Transplantation* 2007; **16**(6): 563-577
26. Benchaouir R, Meregalli M, Farini A, **D'Antona G**, Belicchi M, Goyenvalle A, Battistelli M, Bresolin N, Bottinelli R, Garcia L, and Torrente Y. Restoration of human dystrophin following transplantation of exon skipping engineered DMD patient stem cells into dystrophic mice. *Cell Stem Cell* 2007; 1(6); 646-658
27. Benchaouir R, Meregalli M, Farini A, **D'Antona G**, Belicchi M, Goyenvalle A, Battistelli M, Bresolin N, Bottinelli R, Garcia L, and Torrente Y. Restoration of human dystrophin following transplantation of exon skipping-engineered DMD patient stem cells into dystrophic mice. *Med Sci (Paris)*. 2008; 24(1): 99-101
28. Brocca L, **D'Antona G**, Bachi A & Pellegrino MA. Amino acid supplements improve native antioxidant enzyme expression in the skeletal muscle of diabetic mice. *The Am J Cardiol* 2008; 101: 57E-62E
29. Corsetti G, Pasini E, **D'Antona G**, Nisoli E, Flati V, Assanelli D, Dioguardi FS & Bianchi R. Morphometric changes induced by amino acid supplementation in skeletal and cardiac muscles of old mice. *Am J Cardiol* 2008; 101: 26E-34E

30. Flati V, Pasini E, **D'Antona G**, Specca S, Toniato E & Martinotti S. Intracellular mechanisms of metabolism regulation: the role of signaling via the mammalian target of rapamycin pathway and other routes. *Am J Cardiol* 2008; 101: 16E-21E
31. Pansarasa O, Flati V, Corsetti G, Brocca L, Pasini E & **D'Antona G**. Oral amino acid supplementation counteracts age-induced sarcopenia in elderly rats. *Am J Cardiol* 2008; 101: 35E-41E
32. Parente V, **D'Antona G**, Adami R, Miotti D, Capodaglio P, De Vito G & Bottinelli R. Long-term resistance training improves force and unloaded shortening velocity of single muscle fibres of elderly women. *Eur J Applied Physiol* 2008; 104(5): 885-93
33. Pasini E, Aquilani R, Dioguardi FS, **D'Antona G**, Gheorghide M & Taegtmeier H. Hypercatabolic syndrome: molecular basis and effects of nutritional supplements with amino acids. *Am J Cardiol* 2008; 101: 11E-15E
34. Pellegrino MA, Patrini C, Pasini E, Brocca L, Flati V, Corsetti G & **D'Antona G**. Amino acid supplementation counteracts metabolic and functional damage in the diabetic rat heart. *Am J Cardiol* 2008; 101: 49E-56E
35. Durieux AC, **D'Antona G**, Desplanches D, Freyssenet D, Klossner S, Bottinelli R, Flueck M. Focal adhesion kinase is a load-dependent governor of the slow contractile and oxidative muscle phenotype. *J Physiol*; 587(Pt 14): 3703-17
36. Corsetti G, **D'Antona G**, Dioguardi S, Rezzani R. Topical application of dressing with amino acids improves coetaneous wound healing in aged rats. *Acta Histochemica* 2010; 112(5): 497-507
37. Canepari M, Pellegrino MA, **D'Antona G**, Bottinelli R. Single muscle fiber properties in aging and disuse. *Scand J Med Sci Sports* 2010; 20(1): 10-9
38. Borina E, Pellegrino MA, **D'Antona G**, Bottinelli R. Myosin and actin content of human skeletal muscle fibers following 35 days of bed rest. *J Med Sci Sports*. 2010; 20(1): 65-73
39. Flati, F. Caliaro, S. Specca, G. Corsetti A. Cardile, E. Nisoli, R. Bottinelli, **D'Antona G**. Essential amino acids improve insulin activation of Akt/mTOR signaling in soleus muscle of aged rats. *Int J Immunopathol Pharmacol* 2010; 23(1): 81-89
40. Canepari M, Pellegrino MA, **D'Antona G**, Bottinelli R. Skeletal muscle fibre diversity and underlying mechanisms. *Acta Physiol (Oxf)* 2010; 199(4): 465-76
41. Corsetti G, Stacchiotti A, **D'Antona G**, Nisoli E, Dioguardi FS, Rezzani R. Supplementation with essential amino acids in middle age maintains the health of rat kidney. *Int J Immunopathol Pharmacol* 2010; 23(2): 523-533
42. **D'Antona G**, Nisoli E. mTor signaling as a target of amino acid treatment of the age related sarcopenia. *Interdiscip Top Gerontol* 2010; 37: 115-141
43. **D'Antona G**, Ragni M, Cardile A, Tedesco L, Dossena M, Bruttini F, Caliaro F, Corsetti G, Bottinelli R, Carruba MO, Valerio A, Nisoli E. Branched-chain amino acid supplementation promotes survival and supports cardiac and skeletal muscle mitochondrial biogenesis in middle-aged mice. *Cell Metab* 2010 Oct 6;12(4):362-72.
44. Gondin J, Brocca L, Bellinzona E, **D'Antona G**, Maffioletti NA, Miotti D, Pellegrino MA, Bottinelli R. Neuromuscular electrical stimulation training induces atypical adaptations of the human skeletal muscle phenotype: a functional and proteomic analysis. *J Appl Physiol*. 2011; 110(2):433-50.
45. Valerio A, **D'Antona G**, Nisoli E. Branched-chain amino acids, mitochondrial biogenesis, and healthspan: an evolutionary perspective. *Aging (Albany NY)* 2011; 3(5): 464-78.
46. Minetto MA, Lanfranco F, Motta G, Allasia S, Arvat E, **D'Antona G**. Steroid myopathy: Some unresolved issues. *J Endocrinol Invest* 2011; 34(5): 370-5.

47. Corsetti G, Stacchiotti A, Tedesco L, **D'Antona G**, Pasini E, F.S. Dioguardi, FS. Nisoli E, Rezzani R. Essential amino acid supplementation decreases liver damage induced by chronic ethanol consumption in rats. *Int J Immunopathol Pharmacol* 2011; 24(3): 611-19.
48. Tedesco FS, Hoshiya H, **D'Antona G**, Gerli MF, Messina G, Antonini S, Tonlorenzi R, Benedetti S, Berghella L, Torrente Y, Kazuki Y, Bottinelli R, Oshimura M, Cossu G. Stem cell-mediated transfer of a human artificial chromosome ameliorates muscular dystrophy. *Sci Transl Med*. 2011 Aug 17; 3(96): 96ra78.
49. Farini A, Sitzia C, Navarro C, **D'Antona G**, Belicchi M, Parolini D, Del Fraro G, Razini P, Bottinelli R, Meregalli M, Torrente Y. Absence of T and B lymphocytes modulates dystrophic features in dysferlin deficient animal model.. *Exp Cell Res*. 2012;318(10):1160-74.
50. **D'Antona G**, Mascaro A, Monopoli A, Miglietta D, Ongini E, Bottinelli R. Nitric oxide prevents atorvastatin-induced skeletal muscle dysfunction and alterations in mice. *Muscle Nerve*. 2013 Jan;47(1):72-80. doi: 10.1002/mus.23465. Epub 2012 Oct 5
51. Minetto MA, Botter A, Bottinelli O, Miotti D, Bottinelli R, **D'Antona G**. Variability in Muscle Adaptation to Electrical Stimulation. *Int J Sports Med*. 2013 Int J Sports Med. 2013 Jun;34(6):544-53.
52. Spairani L, Barbero M, Cescon C, Combi F, Gemelli T, Giovanetti G, Magnani B, **D'Antona G**. An electromyographic study of the vastii muscles during open and closed kinetic chain submaximal isometric exercises. *Int J Sports Phys Ther* 2012 7(6): 617-626
53. Brocca L, Mascaro A, **D'Antona G**. Proteomic analysis of plasma after branched chain enriched mixture supplementation in mice. *J Int Soc Sports Nutr*. 2013 Apr 3;10(1):19.
54. Mascaro A, Micheletti P, **D'Antona G**. Acute exposure to essential amino acids (EAA) activates mtor/p70 signaling in soleus muscle of chronically eaa-treated aged rats *Int J Immunopathol Pharmacol*. *Int J Immunopathol Pharmacol*. 2013 Jul-Sep;26(3):673-80
55. Mascaro A, **D'Antona G**. Acute exposure to essential amino acids activates contraction mediated mTOR/p70 signaling in soleus muscle of elderly rats. *Progress in Nutrition*. In press
56. Mascaro A , **D'Antona G**. Proteomic analysis of plasma after four weeks intermittent fasting in mice. Accepted

Not indexed Publications.

57. Gualea MR, **D'Antona G**, Belliato M, Ceriani T, Minelli R. *Action of testosterone on the electrical activity of rat ventricular myocardium at spontaneous and at externally increased heart rate*. *Int J Sports Card* 1997; 6(2) 71-75
58. **D'Antona G**, Gualea MR, Pellegrino MA, Imarisio I and Ceriani T. *Effects of gonadectomy and testosterone administration on glyocalyx composition of the heart left ventricle cells in trained and untrained rats*. *Int J Sports Card* 2000; 1(1): 15-19
59. **D'Antona G**, Pellegrino MA, Rossi R, Naccari Carlizzi C, Reggiani C, Bottinelli R. *Disuse induced-atrophy and contractile impairment of human skeletal muscle fibres*. *Basic Appl Myol* 2000; 10 (1&2): 27-32
60. **D'Antona G**, Gualea MR, and Ceriani T. *Effects of gonadectomy, testosterone replacement and supplementation on cardiac action potentials in the rat*. *Basic Appl Myol* 2001; 11(1): 23-29
61. Pansarasa O, Marzani B, **D'Antona G**, and Marzatico F. *Effects of gonadectomy on lipid peroxide levels and glutathione content in male and female rat brain*. *XI Biennial Meeting of the Society for Free Radical Research International*. Pasquier ed 2003: 475-478
62. **D'Antona G**. *Muscle mass at the top: a likely role for fibre hyperplasia in humans*. *Physiology News* 2006; 63: 26-27

63. **D'Antona G.** *La plasticità del muscolo scheletrico: il fondamento di ogni performance.* Scienza e Sport 2009, 1: 22-27
64. **D'Antona G,** Minetto M. *Attivazione neuromuscolare e regolazione della forza (1).* Scienza e Sport 2009, 2: 22-27
65. **D'Antona G,** Minetto M. *Attivazione neuromuscolare e regolazione della forza (2).* Scienza e Sport 2009, 3: 22-27
66. **D'Antona G,** Minetto M. *L'elettrostimolazione neuromuscolare: basi fisiologiche e principi di utilizzo (1).* Scienza e Sport 2009, 4: 14-19
67. **D'Antona G,** Minetto M. *L'elettrostimolazione neuromuscolare: basi fisiologiche e principi di utilizzo (2).* Scienza e Sport 2010, 5: 16-22
68. **D'Antona G,** Pellegrino MA. *L'invecchiamento dell'apparato contrattile.* Scienza e Sport 2010, 6: 22-26
69. **D'Antona G,** Minetto MA. *I crampi muscolari.* Scienza e Sport 2011, 8: 22-25
70. **D'Antona G,** Losavio MC. *Effetti muscolari degli ormoni (parte prima).* Scienza e Sport 2011, 9: 20-25
71. **D'Antona G,** Minetto MA, Losavio MC, Pintavalle G. *Effetti muscolari degli ormoni (parte seconda).* Scienza e Sport 2011, 10: 20-25
72. **D'Antona G,** Minetto MA. *La fatica muscolare: meccanismi centrali.* Scienza e Sport 2011, 11: 22-25
73. **D'Antona G,** Minetto MA. *La fatica muscolare: meccanismi periferici.* Scienza e Sport 2011, 12: 26-29
74. Spairani L, **D'Antona G,** Ansaldi R. *Patellofemorale pain syndrome: aspetti biomeccanici e proposte riabilitative.* Scienza e Sport, 2012, 13: 72-77.
75. Spairani L, **D'Antona G,** Combi F, Ansaldi R. *Il dolore di spalla e il trattamento riabilitativo dell'atleta "overhead throwing".* Scienza e Sport, 2012, 14: 72-77.
76. Longa E, Pasotti S, **D'Antona G.** *Clima, condizioni ambientali e performance olimpica.* Scienza e Sport, 2012, 15: 28-35.
77. **D'Antona G.** *Esercizio terapia e nutrizione nelle malattie rare: una sfida possibile.* Editoriale. Scienza e Sport, 2012 16: 4.
78. **D'Antona G,** Pasotti S, Protopapa A, Spairani L, Mascaro A. *Effetti muscolari dei glucocorticoidi.* Scienza e Sport, 2012 16: 28-33
79. Mascaro A, **D'Antona G.** *Miopatia da statine: un problema irrisolto.* Scienza e Sport, 2013 17: 26-31.
80. Mascaro A, **D'Antona G.** *Specializzazione e plasticità dei muscoli respiratori.* Scienza e Sport, 2013 18: 28-33.
81. Mascaro A, **D'Antona G,** Rossi A, Pasotti S. *Broncopneumopatia cronica ostruttiva ed esercizio fisico.* Scienza e Sport, 2013 19: 32-37.
82. Foroni A, **D'Antona G.** *Fisiologia e fisiopatologia dell'immersione subacquea: parte prima.* Scienza e Sport, 2013, 20:
83. Foroni A, **D'Antona G.** *Fisiologia e fisiopatologia dell'immersione subacquea: parte prima.* Scienza e Sport, 2013, 21: in press

Book chapters.

84. **D'Antona G** and Nisoli E. mTOR signaling as a target of amino acid treatment of the age-related sarcopenia. In: *Body Composition and ageing. Series: Interdisciplinary topics in Gerontology.* Editor C Mobbs. Karger AG Basel. 2010; 37: 115-141
85. **D'Antona G.** Amino Acid Supplements and Diabetes. In *Bioactive Food as Dietary Interventions for Diabetes.* Ronald Watson, editor. UK: Academic Press, 2013, pp. 83-96.
86. **D'Antona G.** (2013). Nutritional Interventions as Potential Strategy to Minimize Exercise-Induced Muscle Injuries in Sports, *Muscle Injuries in Sport Medicine*, Bisciotti GN (Ed.), ISBN: 978-953-51-1198-6, InTech, DOI: 10.5772/56590.
87. **D'Antona G.** Branched chain amino acids supplementation and obesity. In *Nutrition in the Prevention and Treatment of Abdominal Obesity.* Ronald Watson, editor. Elsevier. In press.