

NAME AND CONTACT DETAILS

GIUSEPPE D'ANTONA,

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<https://scholar.google.it/citations?user=hwaY7BgAAAAJ&hl=en>

CAREER PROFILE (Education and Employment)

- 2020- Director Interdipartimental Centre for Motor and Sport Activities, University of Pavia
- 2020- Associate Professor in Exercise and Sport Sciences, University of Pavia, Italy
- 2017-, National Scientific Qualification for Full Professor in Science of Exercise and Sport (06/N2);
- 2014-2020, National Scientific Qualification for Full Professor in Physiology (05/D1);
- 2014-, Health Director Sport Medicine Centre, University of Pavia, Voghera
- 2012-, Head of University Laboratory for Sport Therapy in Rare Diseases at Sport Medicine Centre, Voghera (Pavia)
- 2009-, Aggregate Professor in Physiology, faculty of Medicine and Surgery, University of Pavia;
- 2004-2020, Researcher in Physiology, faculty of Medicine and Surgery, University of Pavia;
- 2004, Invited visitor at the Program in Gene Function and Expression, University of Massachusetts;
- 2002, Post doctoral position at the Department of Biomedical Science, University of Milano.

Major achievements: From 1999 his scientific interests have been focussed on contractile and biochemical parameters of muscle function in sarcopenia of ageing and muscular dystrophy. He developed original methodologies for evaluation of functional changes induced by ageing and muscular diseases in animal models at the level of whole muscle and single muscle fibers. Since 2005 he has run independent research using physiology, biochemistry and molecular biology techniques to investigate muscular effects of nutritional supplements. From 2012 to 2014 he has successfully run two independent and interactive laboratories and numerous national and international collaborations. From 2014 he is fully dedicated to lead the Sport Medicine Centre of the University of Pavia located in Voghera that is becoming a landmark for physiological research and clinical activity in the region.

Education

- 2017-2019, II Level Master in Musculoskeletal Ultrasound, 100/100, University of Torino;
- 2005, Specialization in Sport Medicine, magna cum laude, University of Pavia;
- 2002, PhD in Physiology, University of Pavia;
- 2000, Invited Visitor at the Centre for Neuroscience, Flinders University of South Australia;
- 1996-1998: Visiting Scholar at the Centre for Neuroscience, Flinders University of South Australia;
- 1996, Medicine and Surgery magna cum laude, University of Pavia (Italy)

HISTORY OF MENTORING AND SUPERVISION

He has been involved in teaching Human Physiology and mentoring/supervision activities for undergraduate and graduate students, in the University of Pavia:

- 2004, Human Physiology at the Faculty of Medicine and Surgery, Course in Sport Sciences
- 2009, Doctoral course in Physiology and Neuroscience
- 2011, Human Physiology (module: Respiratory Physiology) at the School of Medicine, Faculty of Medicine and Surgery
- 2011, Nutraceutical Products Master in the Faculty of Pharmacy

He has been supervisor for the final thesis of more than 50 Bachelors of exercise and sport sciences (BSS), 3 medical doctors, 1 lab technician. He was co-supervisor of PhD students, MSc, Sport Medicine Specialists.

As health director of the Sport Medicine Centre Voghera, he currently supervises, 2 Cardiologists, 1 Nutritionist, 1 Physioterapist, 1 PhD Student, 4 post-graduated BSS scholars, 2 post-graduated BSc scholars.

RESEARCH, INNOVATION ACTIVITY

2019-, Scientific collaboration with Syform, <http://www.syform.com/> finalized to optimization of food supplements mixtures in sports.

2017, -Metrominuto Voghera: Sustainable mobility project in Voghera (in collaboration with Comune di Voghera and ASST Pavia), selected as “Best Practice” by the Italian Federation Hospital Healthcare Companies in 2018.

2016-, Scientific collaboration with Siit - Innovative Health Food Supplements <http://www.siitgroup.com/> finalized to optimization of food supplements mixtures;

2016-2018, Scientific collaboration with Laborest <http://www.laborest.com/> finalized to optimization of food supplements mixtures in health and disease;

2012-, Founded the Laboratory for Motor Activities in Rare Diseases (LUSAMMR) at the Sport Medicine Centre Voghera (Pv) Italy;

2012-, Identification of strategies for sport therapy and nutritional supplementation in sarcopenia and myopathies;

2005-, Muscular effects of nutritional supplements and, in particular, supplementations with amino acids, on skeletal muscle structure and function in animal models and humans;

2005-2010, Scientific collaboration with amino acids oriented companies (Errekappa Euroterapici Milan <http://www.errekappa.it/> and Professional Dietetics Milan <http://www.professionaldietetics.it/it/>) finalized to optimization of amino acids mixtures composition, and identification of the correct strategies of use in diverse conditions including ageing;

1999-2005: Study of contractile and biochemical parameters of muscle function in presence of atrophy and muscular dystrophies.

1998, Acquisition of electrophysiological techniques at the Centre of Neuroscience, Flinders University of South Australia;

1998-1999, Study of the role of sex hormones on electrogenesis and oxidative stress of the heart in small mammals;

1996-1997, Study of the 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.

Google scholar lists the candidate as **#2 In the world** in 'Nutritional Supplementation', and in the **top 20# globally** for 'Muscle Physiology'

Since 2005 he has run an independent research on the effects of nutritional supplementations on the skeletal muscle of the young and the elderly. In 2012 he founded the laboratory for Motor Activities in Rare Diseases at the Sport Medicine Centre of the University of Pavia, devoted to the identification of strategies for sport and nutritional therapy from "bench to bedside".

Invited speaker at high profile **national and international conferences** for example:

- 2019; invited speaker at the 3rd International Summit Forum on "Exercise and Healthy China 2030" June 10-12 Beijing China
- 2019; invited speaker at the 2nd European Society of Sport Nutrition meeting: March 22-23, Milano (Italy);
- 2019, invited chair at 10th Forum Multidisciplinare di Nutrizione: "Nutrizione, Integrazione e complicanze dell'obesità" March 22-23, Milano (Italy);
- 2017; invited Chair 5th National day for Facioscapularhumeral dystrophy (FSHD): Il registro nazionale italiano per la distrofia muscolare fascioscapolomerale: un modello da esportare, September 23, Modena (Italy), Chair of the session "Physical activity in FSHD";
- 2017, invited Chair 7th Forum Multidisciplinare di Nutrizione: Pianeta Nutrizione & Integrazione. "Nutrition Amino Acids and Health" Scientific Committee S. Bernasconi and M. Carruba, June 27, Milano (Italy);
- 2016, 4th International Congress on updates and advances in clinical nutrition and orthomolecular medicine, June 17-18, Valencia (Spain);
- 2016, 7th Forum Multidisciplinare di Nutrizione: Pianeta Nutrizione & Integrazione: Scientific Committee S. Bernasconi and M. Carruba, May 7, Milano (Italy), Chair of the session "Nutrition and supplements";
- 2015, 9th Advanced Workshop of Sports Medicine «Vincenzo Baiamonte», October 15-18 Ettore Majorana Foundation, Erice (Italy);
- 2015, 4th National day for Facioscapularhumeral dystrophy (FSHD): Il registro nazionale italiano per la distrofia muscolare fascioscapolomerale: un modello da esportare, October 21, Modena (Italy), Chair of the session "Physical activity in FSHD";
- 2015, 6th Forum Multidisciplinare di Nutrizione: Pianeta Nutrizione & Integrazione. "Nutrition Amino Acids and Health" Scientific Committee S. Bernasconi and M. Carruba, June 27, Milano (Italy);
- 2014, Keynote speaker at 9th International Conference on Strength Training (ICST), October 23-25 Abano Terme (Italy)
- 2014, Lectio Magistralis: "Longevity and sport" at the 8th Advanced Workshop of Sports Medicine «Vincenzo Baiamonte», October 23-26 Ettore Majorana Foundation, Erice (Italy);
- 2014, Scuola Permanente in Ortopedia, Riabilitazione, Traumatologia, Ricerca e Medicina dello Sport, University of Turin, September 23, Torino (Italy);
- 2014, European College Sport Science workshop titled "Ageing of the musculoskeletal system of the football players: implications for joint health" within the 2nd Science of Football summit (Isokinetic), March 22-23, Milano (Italy);
- 2014, Chair at the conference "La Nutrizione Clinica e la salute dell'osso e del muscolo in ambito geriatrico: dal razionale scientifico agli aspetti pratici", Istituto di Riabilitazione Regina Margherita, Ottobre 10, Pavia (Italy);
- 2014, 5th Forum Multidisciplinare di Nutrizione: Pianeta Nutrizione & Integrazione. Scientific Committee S. Bernasconi and M. Carruba, May 6, Parma (Italy);
- 2013, NutriMi, VIII International forum on Practical Nutrition, April 18-19, Milano (Italy);
- 2013, 5th National Workshop "Città sane: il diritto alla salute dell'infanzia" November 20, Pavia (Italy);
- 2012, International Congress: "Advances in nutrition and training in soccer", October 26, Firenze (Italy);
- 2011, 2nd National day for Facioscapularhumeral dystrophy (FSHD): results and perspectives, October 21, Modena (Italy);
- 2011, 5th National Congress SIRAS, Società Italiana di Riabilitazione ed Alta Specializzazione, December 2, Pavia (Italy)

- 2010, Special session “Electrical stimulation for testing and training in exercise and sports” International Society of Electromyography and Kinesiology (ISEK) meeting, Aalborg (DK), June 2010 (Denmark);
- 2010, Symposium “Clinical and metabolic effects of a cluster of branched chain amino acids” organized by ADI Associazione Italiana Dietetica e Nutrizione Clinica Torino (Italy)
- 2009, Themed meeting “Human and Exercise Physiology” of the Physiological Society, King’s College London (UK);
- 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, Satellite Symposium, “Atrophy and Hypertrophy” at the annual congress of Isokinetic, Bologna (Italy);
- 2007, 11^o Turkish Sport Medicine Congress, Antalya (Turkey);
- 2007, 12th Annual Congress of the European College of Sport Science (ECSS), Jyväskylä (Finland);
- 2007, King’s College Physiology Seminar Series, The Physiological Society, London (UK);
- 2004, 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, Canada);

Conference organization, in particular:

- 2019, Scientific organization of the International Satellite Symposium of the Italian Association of Myology "Physical exercise: pros and cons for taking care myopathic patients", Pavia, Fondazione Mondino, 5 June
- 2018, Scientific organization: International IV Symposium Whole Body Electrostimulation, Firenze 26 May
- 2016, Scientific organization: Sport, nutrizione e terapia farmacologica: un approccio integrato per il miglioramento della salute e della qualità di vita delle persone, Chiavari 2 March
- 2016, Scientific organization: Attività motoria e Nordic Walking adattati alla malattia di Parkinson, Voghera 3/4 December
- 2016, Scientific organization: Attività motoria adattata alla malattia di Parkinson, Voghera 22 April

He received numerous **measures of esteem**, in particular:

- 2018, Invited Program Committee Member 4th International Congress in Sport Sciences Research and Technology Support (icSPORTS), Seville, Spain, chair Ian Cabri
- 2017, Invited Program Committee Member 4th International Congress in Sport Sciences Research and Technology Support (icSPORTS), Porto, Portugal, chair Ian Cabri
- 2016, Invited Program Committee Member 4th International Congress in Sport Sciences Research and Technology Support (icSPORTS), Porto, Portugal, chair Ian Cabri
- 2016, Invited Program Committee Member 4th International Congress in Sport Sciences Research and Technology Support (icSPORTS), Porto, Portugal, chair Ian Cabri
- 2015, Invited Program Committee Member 3rd International Congress in Sport Sciences Research and Technology Support (icSPORTS), Lisbon, Portugal, chair Ian Cabri
- 2014, Invited Lead Guest Editor for the Special issue “Nutrients and Muscle Disease” in BioMed Research International;
- 2014, Invited Program Committee Member 2nd International Congress in Sport Sciences Research and Technology Support (icSPORTS), Rome, Italy, chair Ian Cabri.
- 2013, Invited Program Committee Member 1st International Congress in Sport Sciences Research and Technology Support (icSPORTS), Algarve, Portugal, chair Ian Cabri;
- 2010, Journal cover in Cell Metabolism for the research article “Branched-chain amino acid supplementation promotes survival and supports cardiac and skeletal muscle mitochondrial biogenesis in middle-aged mice”.
- 2003, Young Investigator Award, European Muscle Conference, Montpellier (France);
- 1999, Young Researchers Award, University of Pavia.

He is regularly involved in **reviewing activity** for numerous indexed Journal, in particular:

Journal of Applied Physiology; Journal of Comparative Physiology; Acta Physiologica Scandinavica; Thorax; European Journal of Physiology; European Journal of Applied Physiology (more than 170 papers reviewed), Current Aging Science; Natural Product Communications, 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, American Journal of Physiology, Experimental Gerontology, Endocrine, Experimental Physiology, Nutritional Neuroscience, EBioMedicine, Frontiers in Physiology, Frontiers in Exercise Physiology

He is involved in **reviewing grant applications** for research agencies as:
Ministry of Health: Program of Relevant National Interest (PRIN)
National Agency for the Evaluation of University system (ANVUR)
Association Française contre les myopathies (AFM)
Rita Levi Montalcini Programme for Young Researchers

He is involved in **editorial activities and boards**, in particular:

- 2020-, Editor in Chief “Frontiers in Exercise Physiology”
- 2021-Associated Editor “Muscles” MDPI
- 2020-2021, Invited Editor Research Topic “Predicting individual responses to exercise interventions” volume II in “Frontiers in Physiology”
- 2020-, Associated Editor “International Journal of Molecular Sciences”
- 2020, Invited Editor “Arab Journal of Basic and Applied Sciences” for the special issue: “Determinants and countermeasures to fatigue in health and neuromuscular disease”
- 2019-, Associated Editor of the “Journal of Science in Sport and Exercise” (SSEJ)
- 2019-, Invited Editor Special Issue “Muscle Strength and Muscle Quality in Relation to Nutrition” in “Nutrients”
- 2018-2019, Invited Editor Research Topic “Predicting individual responses to exercise interventions” in “Frontiers in Physiology”
- 2018-, Associated Editor of the “Evidence-Based Complementary and Alternative Medicine”
- 2016-, Associated Editor of “Frontiers in Physiology: Skeletal muscle Physiology”
- 2016-, Associated Editor of “Frontiers in Physiology: Exercise Physiology”
- 2014, Invited Lead Guest Editor for the Special issue Nutrients and Muscle Disease in “BioMed Research International”;
- 2014-, Editorial Board of the “Journal of nutrition and nutritional epidemiology”;
- 2012-2015, Advisory Board of “Sport Science for Health”;
- 2012-2017, Advisory Board of “Scholarly Research Network”;
- 2012-2017, Advisory Board of “Dataset Papers in Medicine”;
- 2011-, Scienza e Sport (Scientific Committee);
- 2008-, Advisory Board of the “European Journal of Applied Physiology”.

He is or has been member of national and international **scientific societies**, in particular:

- 2018-, Italian Society for Motor Sciences;
- 2010-, Italian Society for Obesity;
- 2008-, European College of Sport Science;
- 2008-2012, The Physiological Society;
- 2005-, Italian Sport Medicine Federation;
- 2002-2019, Italian Physiological Society;
- 2001-, European Society for Muscle Research;
- 2001-2007, Biophysical Society;

He is institutionally involved in **research-related activities**, in particular:

- 2018- Vice President of CRIAMS Interdepartmental Centre for Motor and Sport Activities, University of Pavia (CRIAMS)
- 2016-, Member of the Technical-Scientific Board of Centro Universitario Sportivo di Pavia (CUS);
- 2015-2019, In charge of the Animal House Facility of the Maugeri Foundation, Pavia (Italy);
- 2014-2019, Vice-Chair of the Animal Welfare Committee of the University of Pavia;
- 2013-2014, Vice-Chair of the Animal Ethic Committee of the University of Pavia;

- 2012-, Member of the Technical-Scientific Board of the Interdepartmental Centre for Motor and Sport Activities, University of Pavia (CRIAMS);
- 2010-2013, Vice-Chair of the Animal Ethic Committee of the University of Pavia;
- 2009-2015, In charge of the Animal House Facility of the Department of Molecular Medicine, University of Pavia;
- 2008-2014, Member of the Technical-Scientific Board of the Sport Medicine Centre, Maugeri Foundation, Pavia (Italy).

He is regularly involved in **teaching activities**, in particular:

- 2020-Invited teacher II level University Master (University of Napoli Federico II, Faculty of Pharmacy) titled: Nutraceutical Products
- 2019 Invited Teacher at the Summer School “Exercise muscle in health and disease” (III Edition, Santa Chiara Hospital, University of Pisa,
- 2017- Regular Teacher in Advanced Course in “Fat Free Mass, protein and amino acids metabolism in health and disease” Medicine and Surgery, University of Pavia,
- 2017- Tutor at PhD in Biomedical Sciences, track in Physiology, University of Pavia,
- 2012-, Regular teacher in the School for Nutrition and Integration in Sports (Sanis),
- 2011-2018, Regular teacher in II level University Master (University of Pavia, Faculty of Pharmacy) titled: Nutraceutical Products,
- 2011- Regular teacher of Physiology at the School of Medicine, Course in Prevention in Work Places, University of Pavia (Italy),
- 2010-2015, Regular teacher of Human Physiology (module: Respiratory Physiology) at the School of Medicine, Faculty of Medicine and Surgery, University of Pavia (Italy),
- 2009-2016 Member of the Board of PhD in Physiology and Neuroscience, University of Pavia,
- 2004-2011, Regular teacher of Neurophysiology at the Italian Institute of Psychotherapy (IIP, Director Prof. M.T. Bonaccorsi), c/o Foundation Francesco Bonaccorsi, Milan (Italy),
- 2006-, Regular teacher of Human Physiology at the Faculty of Medicine and Surgery, Course in Sport Sciences, University of Pavia (Italy),
- 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.

Grant proposals, in particular:

He has participated as Team component or Principal investigator in numerous national and international funded 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), Cariplo 2018, Prin 2018,2020; Horizon-HLTH-2021-Disease-04

Grant proposals funded as Principal Investigator, in particular:

- 2015, University of Pavia, selected for crowdfunding on the platform www.universitiamo.eu: #Sport4Therapy: together the mission is possible. Role: PI;
- 2014-2017, AFM Association Française contre les myopathies: Study of the role of fatigue in muscle degeneration in Facioscapulohumeral dystrophy. Months: 24. Role: PI;
- 2009; PRIN: Anti-ageing effects of branched chain amino acids in mammals: role of mitochondrial biogenesis. Months: 24. Role: Team PI;
- 2007; PRIN: Cellular and Molecular mechanisms involved in muscle plasticità induced by neuromuscular electrical stimulation in young and elderly subjects. Months: 24. Role: Team PI.

Clinical activities, in particular:

2021-Field Medical Coordinator LBA Basket Bertram Yatch Derthona

2014-, Health Director at the Sport Medicine Centre Voghera, University of Pavia

2012-, Clinical consultant in Sport Medicine at the Sport Medicine Centre Voghera, University of Pavia

2012-2014, Clinical consultant in Sport Medicine at Domus Medica, Vigevano, Italy

2012-2014, Clinical consultant in Sport Medicine at Clastmed, Casteggio, Italy

SECTION 2 – Publication Listing

Total citations	Google Scholar	Scopus			
Number	7831	5140			
H-Index	40	34			

FULL LIST OF PUBLICATIONS

- 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
- **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
- **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
- 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
- **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
- 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
- **D'Antona G**, Mecighian A, Bortolotto S, Pellegrino MA, Staffieri A, Bottinelli R, Reggiani Contractile properties and myosin heavy chain isoform composition in single fibre of human laryngeal muscle. *J Muscle Res Cell Mot* 2002 23: 187-195
- 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
- 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

- 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
 - **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
 - 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
 - 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
 - Toniolo L, Patruno 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
 - Polla B, **D'Antona G**, Bottinelli R, Reggiani C. Respiratory muscle fibres: specialisation and plasticity. *Thorax* 2004 59: 808-17
 - 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
 - Pellegrino M A, Brocca L, Dioguardi FS, Bottinelli R, **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
 - 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
 - **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
 - 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
 - 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
 - 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
- * equally contributed

- 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 * equally contributed
- **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
- **D'Antona G**, Brocca L, Pansarasa O, Rinaldi C, Tupler R & Bottinelli R. Structural and functional alterations of muscle fibres in the novel mouse model of facioscapulohumeral muscular dystrophy. *J Physiol* 2007 584: 997-1009
- 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.
- Torrente Y., Belicchi M., Marchesi C., **D'Antona G.**, Cojamagnan F., Pisati F, Gavina M, Tonlorenzi R, Fagiolari G, Lamperti C, Giordano R., Porretti L, Lopa R, Sampaolesi M, Guglieri M, Vicentini L, Grimoldi N, Tiberio F, Songa V, Baratta P, Prella A, Forsenigo L, Pansarasa O, Rinaldi C, Mouly V, Butler-Browne GS, Comi GP, Biondetti P, Moggio M, Gaini S, Stocchetti N, Priori A, D'Angelo MG, Turconi A, Bottinelli R, Cossu G, Rebullia P, Bresolin N. Autologous transplantation of AC133+ stem cells in Duchenne muscular dystrophy: preclinical and clinical evidences. *Cell Transplantation* 2007; 16(6): 563-577
- Benchaouir R, Meregalli M, Farini A, **D'Antona G**, Belicchi M, Goyenvallé 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
- Benchaouir R, Meregalli M, Farini A, **D'Antona G**, Belicchi M, Goyenvallé 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
- Brocca L, **D'Antona G**, Bachi A & Pellegrino MA. Amino acid supplements improve native antioxidant enzyme expression in the skeletal muscle of diabetic mice. *Am J Cardiol* 2008; 101: 57E-62E
- 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
- Flati V, Pasini E, **D'Antona G**, Specia 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
- 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
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