

Giampietro Alberti



Position

Associate Professor

Head of the College of Studies School of Exercise Sciences, Department of Biomedical Sciences for Health, University of Milan

Affiliation

University of Milan

Department of Biomedical Sciences for Health

School of Exercise Sciences

Education

1973 Degree in Physical Education, Superior Institute of Physical Education of the Lombardy, Milan

1976 Qualification to practise the profession of Teacher of Physical Education, Local education authority, Milan

1978 Fulltime Teacher of Physical Education (D.M. 5.5.73) Ministry of Public Education

1993 Degree in UFR-STAPS (Sciences and techniques of physical activities and sports), University of Bourgogne, Dijon (France)

Teaching responsibilities

2002 – present 1st and 2nd level Degree Courses of the Faculty of Exercise Sciences of the University of Milan :

- Training theory and methodology
- Individual sports and athletics: training theory and methodology
- Individual sports: periodization training
- Individual and team sports (football, basketball, volleyball, rugby): methods and didactics
- Motor skills' assessment methods

1999 - 2002 Contract Professor, Faculty of Exercise Sciences, University of Milan

1976 - 1999 Contract Professor, Superior Institute of Physical Education of the Lombardy, Milan

1993 - 1996 Adviser Professor, University of Bourgogne UFR-STAPS, Dijon (France)

Past positions

1970 - 2002 Ministry of Public Education, Teacher of Physical Education at middle and high school

1986 - 1989 Regular Teacher of Physical Education, employed at Superior Institute of Physical Education of the Lombardy (Milan) as coordinator for didactics.

Further information

- Athletics trainer of Universiade, European and National championships medalists.
- Author and director of historical and educational sport movies.
- Writer of technical and educational books and articles.

Research interests

Movement analysis and athletic performance addressed to:

- assessment and improvement of strength
- assessment and systematic controlling of athletic performance
- assessment and selective training of the respiratory muscles
- exercise analysis by infrared thermography

Selected Publications

1. Alberti G., Oliveri E., Caumo A., Ongaro L.
"Effect of the practice of constant physical exercise on respiratory parameters in smoking and non-smoking subjects"
Sport Sciences for Health; 2005; 1(2): 91-95,
2. Perseghin G., Burska A., Lattuada G., Alberti G., Costantino F., Ragogna F., Oggioni S., Scollo A., Terruzzi I., Luzi L.
"Increased serum resistin in elite endurance athletes with high insulin sensitivity"
Diabetologia 2006; 49: 1893–1900.
3. Perseghin G., De Cobelli F., Esposito A., Lattuada G., Terruzzi I., La Torre A., Belloni E., Canu T., Scifo P., Del Maschio A., Luzi L. and Alberti G.
"Effect of the sporting discipline on the right and left ventricular morphology and function of elite male track runners: A magnetic resonance imaging and phosphorus 31 spectroscopy study"
American Heart Journal 2007 Nov; 154(5):937-42.
4. Alberti G., Ragazzi R.
"Maximum strength and vertical jump: effects of electromyostimulation versus isometric training"
Medicina dello sport 2007; 60 (04): 557-565,
5. Alberti G., Gaeni M., Caimi A., Pisoni D., Roi G. S
"Energetic Expenditure During In-Field Rehabilitation after ACL Reconstruction in Soccer Players"
Medicine & Science in Sports & Exercise: Volume 40(5) 2008 May; Supplement 1: S451
6. Invernizzi P.L., Caporaso G., Longo S., Scurati R, Alberti G.
"Correlations between upper limb oxygen kinetics and performance in elite swimmers "
Sport Sciences for Health; 2008; 3(1-2): 19-25
7. Alberti G., Sirtori C.R., Iriti M., Arnoldi A.
"Acceptability of lupin protein products in healthy competitive athletes" –
Sport Sciences for Health; 3(3): 65-71, 2008. DOI 10.1007/s11332-008-0057-3
8. Gualtieri D., Cattaneo A., Sarcinella R., Cimadoro G., Alberti G.
"Relationship between balance capacity and jump ability in amateur soccer players of different age"
Sport Sciences for Health 2008; 3 (3): 73-76
9. Perseghin G., De Cobelli F., Esposito A., Belloni E., Lattuada G., Canu T., Invernizzi P.L., Ragogna F., La Torre A., Scifo P., Alberti G., Del Maschio A., Luzi L.
"Left ventricular function and energy metabolism in middle-aged men undergoing long lasting sustained aerobic oxidative training"
Heart. – 2009; 95:8: 630-635
10. Perseghin G., Lattuada G., Ragogna F., Alberti G., La Torre A., Luzi L.
"Free leptin index and thyroid function in male highly trained athletes."
European Journal of Endocrinology 2009; 161: 871-876
11. Esposito F., Limonta E, Alberti G, Veicsteinas A, Ferretti G.
Effect of respiratory muscle training on maximum aerobic power in normoxia and hypoxia.
Medicine and Science in Sports and Exercise. - 2010 May, 42:5 suppl. 1: 81-81.
12. Esposito F., Limonta E, Alberti G, Veicsteinas A, Ferretti G.
"Effect of respiratory muscle training on maximum aerobic power in normoxia and hypoxia".
Respiratory Physiology & Neurobiology 2010: 268-272.
13. Izzicupo P., Di Valerio V., D' Amico M.A., Di Mauro M., Pennelli A., Falone S., Alberti G., Amicarelli F., Miscia S., Gallina S., Di Baldassarre A.
"NAD(P)H Oxidase and pro-inflammatory response during maximal exercise: role of C242T polymorphism of the P22PHOX subunit"
Int. J Immunopathol. Pharmacol. 2010 Jan-Mar;23(1):203-11
14. Esposito F., Limonta E, Alberti G, Veicsteinas A, Ferretti G.
"Assessment of respiratory muscle training effects"
Respiratory physiology and neurobiology. - 2010 Sep. 30: 115-117.
15. Benedini S., Caimi A., Alberti G., Terruzzi I., Dellerma N., La Torre A., Luzi L..
"Increase of homocysteine level after half-marathon running: a detrimental metabolic effect of sport?"
Sport Sciences for Health; 2010; 6 (1): 35-41,.

16. Terruzzi I.M., Senesi P., Montesano A., La Torre A., Alberti G., Benedini S., Caumo A., Fermo I., Luzi L.
"Genetic polymorphisms of the enzymes involved in DNA methylation and synthesis in elite athletes"
 Physiological genomics, - 2011 Aug; 43:16 pp. 965-973.
17. Vitale J.A., Formenti D., Alberti G., Weydahl A., Carandente F.
"Can the knowledge of chronotype be useful for the motivation and the training plans?" Sport Sciences for Health. - 2012 Sep; 8:1 supplement, pp. 8-9.
18. Ludwig N., Gargano M., Formenti D., Bruno D. Ongaro L., Alberti G.
"Breathing training characterization by thermal imaging: a case study"
 Acta of Bioengineering and Biomechanics, 2012; Vol. 14, No. 3: 41-47
19. Alberti G., Garufi M., Silvaggi N.
"L'allenamento della forza a bassa velocità: il metodo della serie lenta a scalare"
 Calzetti e Mariucci Editori, luglio 2012. ISBN: 978-88-6028-338-2
 Libro vincitore del 47° Concorso Letterario CONI - sezione tecnica.
20. Alberti, G.; Cavaggioni, L.; Silvaggi, N.; Caumo, A. & Garufi, M.
"Resistance Training With Blood Flow Restriction Using the Modulation of the Muscle's Contraction Velocity"
 Strength & Conditioning Journal, LWW 2013; 35: 42-47
21. Gaudino P, Gaudino C, Alberti G, Minetti AE.
"Biomechanics and predicted energetics of sprinting on sand: Hints for soccer training".
 Journal of Science and Medicine in Sport 2013; 16: 271-275
22. Gaudino P, Iaia FM, Alberti G, Strudwick T, Atkinson G, Gregson W.
"Monitoring training in elite soccer players: systematic bias between running speed and metabolic power data."
 International Journal of Sports Medicine, 2013; 34: 963-968
23. Formenti, D.; Ludwig, N.; Gargano, M.; Gondola, M.; Dellerma, N.; Caumo, A. & Alberti, G.
"Thermal imaging of exercise-associated skin temperature changes in trained and untrained female subjects"
 Ann Biomed Eng, 2013, 41, 863-871
24. Bocolini G, Brazziti A, Bonfanti L, Alberti G.
"Using balance training to improve the performance of youth basketball players"
 Sport Sciences for Health; 2013 Aug, 9:2, pp 37-42
25. Cimadoro G., Paizis C., Alberti G., Babault N.
"Effects of different wobble boards on lower-limb EMG activity"
 Neuroscience Letters 548 – 2013, 228-232
26. Tringali C., Scala L., Silvestri I., Vitale J., Scurati R., Michielon G., Alberti G., Venerando B.
"Protective role of 17-β-estradiol towards IL-6 leukocyte expression induced by intense training in young female athlete"
 Journal of Sports Sciences 2014; 32(5): 452-461,
27. Gaudino P, Iaia FM, Alberti G, Strudwick T, Atkinson G, Gregson W.
"Systematic Bias between Running Speed and Metabolic Power Data in Elite Soccer Players: Influence of Drill Type"
 International Journal of Sports Medicine, 2013; 35: 489-493,
28. Alberti G., Iaia F. M., Arcelli E., Cavaggioni L., Rampinini E.
"Goal scoring patterns in major European soccer leagues"
 Sport Sciences for Health; 2013 Sep, 9 (3) Published online: 13 September 2013
29. Alberti G., Cavaggioni L., Trecroci A., Bianchi R., Ongaro L.
"Back wall squat test: postura e grado di piegamento al ginocchio nell'esercizio di squat. Parte prima."
 Strength & Conditioning Journal, Anno II, numero 6: 45-47, settembre 2013 ISSN 2281-3772
30. Ludwig N., Formenti D., Gargano M. and Alberti G.
"Skin temperature evaluation by Infrared Thermography: Comparison of Image Analysis Methods"
 Infrared Physics & Technology, 2015; 67: 322-28.
31. Cazzola D., Alberti G., Ongaro L., Minetti A.E.
"The vertical excursion of the body visceral mass during vertical jumps is affected by specific respiratory maneuver"
 Human Movement Science 2014, 33, 369-380

32. Alberti G., Cavaggioni L., Trecroci A., Bianchi R., Ongaro L.
"Back wall squat test: postura e grado di piegamento al ginocchio nell'esercizio di squat. Parte seconda."
 Strength & Conditioning Journal, Anno III, numero 7: 51-57, gennaio 2014
33. Alberti G.
"Editoriale"
 Scienza&Sport, 22: 4, gennaio-marzo 2014.
34. Bardelli M., Alberti G.
"Disturbi Specifici dell'Apprendimento: quali implicazioni nel successo e nell'abbandono sportivo?."
 Strength & Conditioning Journal, Anno III, numero 8: 61-66, aprile-giugno 2014
35. Tringali C., Brivio I., Stucchi B., Silvestri I., Scurati R., Michielon G., Alberti G., Venerando B.
"Prevalence of a characteristic gene profile in high-level rhythmic gymnasts"
 Journal of Sports Sciences. 2014; 32 (14): 1-7.
36. Formenti D., Trecroci A., Cavaggioni L., Caumo A., Alberti G.
"Heart rate response to a marathon cross-country skiing race: a case study"
 Sport Sciences for Health 2014; 11(1): 1-4.
37. Rampinini E., Connolly D.R., Oppici L., Alberti G., La Torre A., Bosio A.
"Reliability of the assessment of peripheral muscle fatigue induced by high-intensity intermittent exercise"
 Journal of Sports Medicine and Physical Fitness 2014; 5-27: 1-23.
38. Cavaggioni L., Ongaro L., Alberti G.
"Respirazione & stabilità: Un approccio innovativo di core training"
 Strength & Conditioning Journal 2014; 3 (9): 41-46
39. Gaudino P., Alberti G., Iaia F. M.
"Estimated metabolic and mechanical demands during different small-sided games in elite soccer players"
 Human Movement Science 2014 Aug; 36: 123-133.
40. Rampinini E, Connolly D.R., Ferioli D, La Torre A., Alberti G., Bosio A.
"Peripheral neuromuscular fatigue induced by repeated-sprint exercise: cycling vs running"
 The Journal of Sports Medicine and Physical Fitness 2014; 32 (14): 49-59
41. Riboli A., Limonta E., Cè E., Venturelli M., Alberti G., Veicsteinas A., Esposito F.
"Comparison between continuous incremental ramp test and discontinuous square-wave test for $\dot{V}O_2$ max assessment in long distance runners and soccer players"
 Sport Sciences for Health 2014; 10 (1) supplement: 127.
42. Trecroci A., Rossi A., Formenti D., Esposito F., Alberti G.
"Effects of a task-specific warm-up on a single-sprint cycling performance"
 Sport Sciences for Health 2014; 10 (1) supplement: 48.
43. Rossi A., Formenti D., Chirico M, Trecroci A., Alberti G.
"The slow strip set resistance training"
 Sport Sciences for Health 2014; 10 (1) supplement: 78-79.
44. Cavaggioni L., Bardelli M., Pittaluga E., Alberti G.
"Functional Movement Screen TM scores in young basketball players"
 Sport Sciences for Health 2014; 10 (1) supplement: 75.
45. Alberti G., Annoni M., Ongaro L., Scurati R., Michielon G..
"Athletic performance decreases in young basketball players after sitting"
 International Journal of Sports Science & Coaching 2014; 9 (5): 975-984.
46. Rampinini E., Alberti G., Fiorenza M., Riggio M., Sassi R., Borges T.O., Coutts A.J.
"Accuracy of GPS devices for measuring high-intensity running in field-based team sports"
 International Journal of Sports Medicine, 2015; 36 (1): 49-53.
47. Roi G.S., Monticone M., Salvoni M., Sassi R., Alberti G.
"Self-reported knee symptoms assessed by KOOS questionnaire in Downhill Runners (skyrunners)"
 Plos One vol. 2015; 10 (4): 1-12.
48. Iaia F. Marcello, Fiorenza Matteo, Perri E., Alberti G., Millet G., Bangsbo J.
"The Effect of Two Speed Endurance Training Regimes on Performance of Soccer Players"
 PLoS ONE 2015; 10 (9): 1-16
49. Gaudino P., Iaia F.M., Strudwick A.J., Hawkins R.D., Alberti G., Atkinson G., Gregson W.
"Factors Influencing Perception of Effort (Session Rating of Perceived Exertion) During Elite Soccer Training"
 International Journal of Sports Physiology and Performance, 2015; 10(7):860-864.

50. Trecroci A., Cavaggioni L., Caccia R. and Alberti G.
"Jump Rope Training: Balance and Motor Coordination in Preadolescent Soccer Players"
 Journal of Sports Science and Medicine (2015) 14, 792-798
51. Cavaggioni L., Ongaro L., Zannin E., Iaia F.M., Alberti G.
"Effects of different core exercises on respiratory parameters and abdominal strength"
 Journal of Physical Therapy Science 2015 Oct; 27(10): 3249–3253.
 J Phys Ther Sci. Published online 2015 Oct 30.
52. Formenti D., Ludwig N., Trecroci A., Gargano M., Michielon G., Caumo A., Alberti G.
"Dynamics of thermographic skin temperature response during squat exercise at two different speeds"
 Journal of Thermal Biology. 2016; 59:58-63.
53. Alberti G.
"Rivalutazione della ginnastica respiratoria a scuola"
 Franco Angeli Editore, 2016. ISBN 978-88-917-2712-1
54. Evangelista P., Alberti G.
"La fisica dello squat"
 Strength & Conditioning. - ISSN 2281-3772. - Anno V, numero 16, 2016(2016 Mar), pp. 31-40.
55. Evangelista P., Alberti G.
"The physics of the squat"
 EWF Scientific Magazine – Anno II, numero 5, sett.-dic. 2016, pp. 24-37
56. Alberti G., Mocciola S., Cavaggioni L.
"The usefulness of functional movement screen at school"- L'utilizzo del functional movement screen in ambito scolastico
 Formazione e insegnamento - Rivista internazionale di Scienze dell'educazione e della formazione - European Journal of Research on Education and Teaching.
 2016; Anno XIV - Supplemento Numero 3 - pp.203-2012
57. Ludwig N, Trecroci A, Gargano M, Formenti D, Bosio A, Rampinini E, Alberti G
"Thermography for skin temperature evaluation during dynamic exercise: a case study on an incremental maximal test in elite male cyclists."
 Applied Optics 2016; 55 (34): 26-30
58. Trecroci A., Milanović Z., Rossi A., Broggi M., Formenti D., Alberti G.
"Agility profile in sub-elite under-11 soccer players: is SAQ training adequate to improve sprint, change of direction speed and reactive agility performance?"
 Research in Sports Medicine 2016; 25: 1-10
59. Trecroci, D. Formenti, A. Rossi, F. Esposito, G. Alberti
"Acute effects of kinesio taping on a 6 s maximal cycling sprint performance".
 Research in Sports Medicine 2016; 25 (2): 48-57.
60. J.A. Vitale, A. Montaruli, G. Michielon, R. Scurati, G. Alberti, F. Carandente, E. Roveda.
"Sleep quality and cytokine expression after an exhaustive exercise : influence of ACE polymorphism I/D"
 Sleep and Biological Rhythms. 2017 Jan;- 15(1): 31-37
61. Formenti D., Ludwig N., Rossi A., Trecroci A., Alberti G., Gargano M., Merla A., Ammer K., Caumo A.
"Skin temperature evaluation by infrared thermography: Comparison of two image analysis methods during the nonsteady state induced by physical exercise"
 Infrared Physics & Technology 2017; 81: 32–40
62. Riboli A., Cé E., Rampichini S., Venturelli M., Alberti G., Limonta E., Veicsteinas A., Esposito F.
"Comparison between continuous and discontinuous incremental treadmill test to assess the velocity at VO₂max"
 Medicine and Physical Fitness 2017; 56: 1119-1125
63. Iaia F, Fiorenza M, Larghi L, Alberti G, Millet G, Girard O
"Short- or long-rest intervals during repeated-sprint training in soccer?"
 PLoS ONE 2017; 12 (2): 936-941
64. Prina F., Alberti G.
"Amnesia glutea: descrizioni e rimedi" prima parte
 Strength & Conditioning Journal. 2017 Luglio; Anno VI, numero 21: 45-50.
65. Prina F., Alberti G.
"Amnesia glutea: descrizioni e rimedi" seconda parte
 Strength & Conditioning. 2017 Ottobre, Anno VI, numero 22: 47-52.

66. Iaia F..M., Fiorenza M., Larghi L., Alberti G., Millet G.P., Girard O.
"Short- or long-rest intervals during repeated sprint training in soccer?"
PLoS ONE 2017; 12 (2): 2-15.
67. Rossi A., Formenti D., Cavaggioni L., Morgante A., Caruso P., Gargano M., Ludwig N., Merzagora I. & Alberti G.
"Facial asymmetry in the resting state reflects anxiety status on young males"
Laterality: Asymmetries of Body, Brain and Cognition, 2017; 0 (0): 462-478
68. Trecroci A., Milanović Z., Frontini M., Alberti G.
"Physical performance comparison between under 15 elite and sub-elite soccer players"
Journal of Human Kinetics 2018; 61: 209-216.
69. Cavaggioni L., Trecroci A., Tosin M., Iaia F.M., Alberti G.
"Individualised dry-land intervention program of an elite paralympic swimmer: a case report"
Journal of Sports Medicine and Physical Fitness (ACCEPTED).
70. Trecroci A., Cavaggioni, L., Lastella, M., Broggi, M., Perri, E., Iaia, F.M., Alberti G.
"Effects of traditional balance and slackline training on physical performance and perceived enjoyment in young soccer players"
Research in Sports Medicine 2018; 26(4): 450-461.
71. Trecroci. A., Formenti D., Ludwig N., Gargano M., Bosio A., Rampinini E., Alberti G.
"Bilateral asymmetry of crank torque is not related to bilateral symmetry of skin temperature during an incremental exercise to exhaustion in elite"
PEERJ 2018; 6, e4438
72. Trecroci A., Longo, S., Perri, E., Iaia, F.M., Alberti G.
"Field-based physical performance of elite and sub-elite middle-adolescent soccer players"
Research in Sports Medicine 2018; 3: 1-12.