

Publikationen der Abteilung Sportmedizin
Stand: 25.06.09

INHALTSVERZEICHNIS

	Seite
I. Originalartikel	2 – 14
II. Übersichtsartikel	15 – 18
III. Editorials, Case Reports, Letters	19 - 20
IV. Kongressbeiträge	21 - 23
V. Buchbeiträge	24 - 25
VI. Habilitationen	26
VII. Dissertationen	27 – 30
VIII. Magisterarbeiten	31
IX. Diplomarbeiten	32
X. Kongressbandbeiträge	33
XI. Buch	34
XII. Abstracts	35 - 58

I. Originalartikel

1. Friedmann B. Leistungsdiagnostik und Trainingssteuerung. Ther Umsch. 1988;55:246-250.
2. Jost J, Weiss W, Weicker H. Basale und belastungsbedingte Anpassungen von Adrenorezeptoren, Katecholaminen und Stoffwechsel bei Ruderen während intensiver Trainingsphase und darauffolgender Wettkampfphase. In: Bennett P, Jeschke D, eds. Sport und Medizin Pro und Contra. München: Zuckschwerdt Verlag; 1990.
3. Mairbäurl H, Schobersberger W, Oelz O, Bärtsch P, Eckardt KU, Bauer C. Unchanged Invivo P-50 at High Altitude Despite Decreased Erythrocyte Age and Elevated 2,3-Diphosphoglycerate. J Appl Physiol 1990;68:1186-1194.
4. Bärtsch P, Maggiorini M, Ritter M, Noti C, Vock P, Oelz O. Prevention of high-altitude pulmonary edema by nifedipine. N Engl J Med 1991;325:1284-1289.
5. Bärtsch P, Maggiorini M, Schobersberger W, Shaw S, Rascher W, Girard J, Weidmann P, Oelz O. Enhanced exercise-induced rise of aldosterone and vasopressin preceding mountain sickness. J Appl Physiol 1991;71:136-143.
6. Bärtsch P, Pfluger N, Audétat M, Shaw S, Weidmann P, Vock P, Vetter W, Rennie D, Oelz O. Effects of slow ascent to 4559 m on fluid homeostasis. Aviat Space Environ Med 1991;62:105-110.
7. Bonzel KE, Wildi B, Weiß M, Schärer K. Spiroergometric performance of children and adolescents with chronic renal failure. Pediatr Nephrol 1991;5:22-28.
8. Lenz T, Werle E, Strobel G, Weicker H. O-methylated and sulfoconjugated catecholamines: differential activities at human platelet alpha₂ adrenoceptors. Can J Physiol Pharmacol. 1991;69:729-736.
9. Regard M, Landis T, Casey J, Maggiorini M, Bärtsch P, Oelz O. Cognitive changes at high altitude in healthy climbers and in climbers developing acute mountain sickness. Aviat Space Environ Med. 1991;62:291-295.
10. Reinhart WH, Kayser B, Singh A, Waber U, Oelz O, Bärtsch P. Blood rheology in acute mountain sickness and high altitude pulmonary edema. J Appl Physiol. 1991;71:934-938.
11. Strobel G, Weicker H. Catecholamine sulfates as internal standards in HPLC determinations of sulfoconjugated catecholamines in plasma and urine. Clin Chem. 1991;37:196-199.
12. Vock P, Brutsche MH, Nanzer A, Bartsch P. Variable Radiomorphologic Data of High Altitude Pulmonary Edema - Features from 60 Patients. Chest.

1991;100(5):1306-1311.

13. Hack V, Strobel G, Rau JP, Weicker H. The effect of maximal exercise on the activity of neutrophil granulocytes in highly trained athletes in a moderate training period. *Eur J Appl Physiol* 1992;65:520-524.
14. Herren T, Bärtsch P, Haeberli A, Straub P. W. Increased thrombin - antithrombin III complex after 1 h of physical exercise. *J Appl Physiol* 1992;73:2499-2504.
15. Mairbäurl H, Hoffmann JF. Internal Magnesium, 2,3-diphosphoglycerate, and the regulation of the steady-state volume of human red blood cells by the Na/K/2Cl cotransport system. *J Gen Physiol* 1992;99:F721-F746.
16. Schlaepfer TE, Bärtsch P, Fisch HU. Paradoxical effects of mild hypoxia and moderate altitude on human visual perception. *Clin Sci* 1992;83:633-636.
17. Bärtsch P, Merki B, Hofstetter D, Maggiorini M, Kayser B, Oelz O. Treatment of acute mountain sickness by simulated descent: A randomised controlled trial. *Br Med J* 1993;306:1098-1101.
18. Hack V, Weiss M, Weicker H. Lymphozytensubpopulation und Immunoglobulkonzentration in Ruhe und nach erschöpfender Laufbandbelastung von hochausdauertrainierten Athleten während zweier Trainingsphasen. *Dtsch Z Sportmed* 1993;44:430-436.
19. Kayser B, Jean D, Herry JP, Bärtsch P. Pressurization and acute mountain sickness. *Aviat Space Environ Med* 1993;64:928-931.
20. Kinscherf R, Kirschfink G, Strobel G, Weicker H. Influence on myoadenylase deaminase function in rat skeletal muscle after homologous immunization with the purified enzyme. *Int J Sports Med* 1993;14:214-219.
21. Mairbäurl H, Oelz O, Bärtsch P. Interactions between Hb, DPG, ATP and Cl determine the change in Hb-O₂-affinity at high altitude. *J Appl Physiol* 1993;74:40-48.
22. Bauder K, Kalus V, Schneekluth U, Weiß M, Bärtsch P. Trainingssteuerung beim Rudern im Einer durch ergometrische Bestimmung des Conconi-Deflektionspunktes. *Dtsch Z Sportmed* 1994;45:308-316.
23. Baumgartner RW, Bärtsch P, Maggiorini M, Waber U, Oelz O. Enhanced cerebral blood flow in acute mountain sickness. *Aviat Space Environ Med* 1994;65:726-729.
24. Bircher HP, Eichenberger U, Maggiorini M, Oelz O, Bärtsch P. Relationship of mountain sickness to physical fitness and exercise intensity during ascent. *J Wild Med* 1994;5:302-311.
25. Hack V, Strobel G, Weiss M, Weicker H. PMN cell counts and phagocytic activity

of highly trained athletes depend on training period. J Appl Physiol 1994;77(4):1731-1735.

26. Hohenhaus E, Niroomand F, Goerre S, Vock P, Oelz O, Bärtsch P. Nifedipine does not prevent acute mountain sickness. Am J Respir Crit Care Med 1994;150:857-860.
27. Kinscherf R, Fischbach T, Mihm S, Roth S, Hohenhaus-Sievert E, Weiss C, Edler L, Bärtsch P, Dröge W. Effect of glutathione depletion and oral N-acetyl-cysteine on CD4+ and CD8+ cells. FASEB J 1994;8:448-451.
28. Mielke K, Strobel G. The potential of intact human platelets for sulfoconjugation of norepinephrine in vitro. Life Sci 1994;55:1657-1663.
29. Reinhart WH, Goerre S, Kurtz A, Bärtsch P. Acetazolamide reduces the erythropoietin response to hypoxia at high altitude in humans. J Wildern Med 1994;5:312-317.
30. Stäubli M, Vogel F, Bärtsch P, Flückiger G, Ziegler WH. Hyperventilation-induced changes of blood cell counts depend on hypocapnia. J Appl Physiol 1994;69:402-407.
31. Bärtsch P, Welsch B, Albert M, Friedmann B, Levi M, Kruithof EKO. Balanced activation of coagulation and fibrinolysis after a 2-h triathlon. Med Sci Sports Exerc 1995;27:1465-1470.
32. Beck J, Breton S, Maibäurl H, Laprade R, Giebisch G. The relationship between sodium transport and intracellular ATP in isolated perfused rabbit proximal convoluted tubule. Am J Physiol;261:F634-639.
33. Dorsch M, Jost J, ClaussS, Friedmann B, Weiß M. Stoffwechselbeanspruchung im Basketballspiel und Training. Dtsch Z Sportmed 1995;11/12:618-623.
34. Goerre S, Wenk M, Bärtsch P, Lüscher TF, Niroomand F, Hohenhaus E, Oelz O, Reinhart WH. Endothelin-1 in pulmonary hypertension associated with high-altitude exposure. Circulation 1995;90:359-364.
35. Hausdörfer C, Pedal I, Zimmer G, Remppis A, Strobel G. Katecholamine, myofibrilläre Degeneration des Herzmuskels und kardiales Troponin T bei verschiedenen Agonietypen. Arch Kriminol 1995;196:46-57.
36. Hohenhaus E, Paul A, McCullough RE, Kücherer H, and Bärtsch P. Ventilatory and pulmonary vascular response to hypoxia and susceptibility to high altitude pulmonary oedema. Eur Respir J 1995;8:1825-1833.
37. Keller HR, Maggiorini M, Bärtsch P, Oelz O. Simulated descent v. dexamethasone in treatment of acute mountain sickness: a randomised trial. Br Med J 1995;310:1232-1235.

38. Weiss C, Kinscherf R, Roth S, Friedmann B, Fischbach T, Reus J, Dröge W, Bärtsch P. Lymphocyte subpopulations and concentrations of soluble CD8 and CD4 antigen after anaerobic training. *Int J Sports Med* 1995;16:117-122.
39. Eichenberger U, Weiss E, Riemann D, Oelz O, Bärtsch P. Nocturnal periodic breathing and the development of acute high altitude illness . *Am J Respir Crit Care Med* 1996;154:1748-1754
40. Friedmann B, Siebold R, and Bärtsch P. Vergleich der anaeroben Leistungsfähigkeit von 400m- und Langstreckenläufern unter Anwendung unterschiedlicher Meßmethoden. *Dtsch Z Sportmed* 1996, 6:379-390.
41. Gunga HC, Röcker L, Behn C, Hildebrandt W, Koralewski E, Rich I, Schobersberger W, Kirsch K. Shift working at high altitude in the Chilenean Andes (< 3600 m) and its influence on erythropoietin on the low pressure system. *J Appl Physiol* 1996;81:846-852.
42. Jost J, Friedmann B, Dorsch M, Jalak R, Weiß M. Sportmedizinische Leistungsdiagnostik und Trainingssteuerung im Basketball. *Dtsch Z Sportmed* 1996;1:3-16.
43. Kinscherf R, Hack V, Fischbach T, Friedmann, Weiss C, Edler L, Bärtsch P, Dröge W. Low plasma glutamine in combination with high glutamate levels indicate risk for loss of body cell mass in healthy individuals: the effect of N-acetyl-cysteine. *J Mol Med* 1996;74:393-400.
44. Kleger GR, Bärtsch P, Vock P, Heilig B, Roberts LJ, Ballmer PE. Evidence against an increase of capillary permeability in subjects exposed to high altitude. *J Appl Physiol* 1996;81:1917-1923.
45. Mairbäurl H, Herth C. Na+-K+-2Cl- cotransport, Na+/H+ exchange, and cell volume in ferret erythrocytes. *Am J Physiol* 1996;271:C1603-C1611.
46. Scherrer U, Vollenweider L, Delabays A, Savcic M, Eichenberger U, Kleger GR, Firkle A, Ballmer P, Nicod P, Bärtsch P. Inhaled nitric oxide for high-altitude pulmonary edema. *N Engl J Med* 1996;334:624-629.
47. Strobel G, Neureither M, Bärtsch P. Effect of acute mild hypoxia during exercise on plasma free and sulfoconjugated catecholamines. *Eur J Appl Physiol* 1996;73:82-87.
48. Hack V, Weiss C, Friedmann B, Suttner S, Schykowski M, Erbe N, Benner A, Bärtsch P, Dröge W. Decreased plasma glutamine level and CD4+ T-cell number in response to 8 weeks of anaerobic training. *Am J Physiol (Endocrinol Metab)* 1997;272:E788-E795.
49. Maggiorini M, Bärtsch P, Oelz O. Association between raised body temperature and acute mountain sickness: cross sectional study. *Brit Med J* 1997;315:403-404.

50. Mairbäurl H, Wodopia R, Eckes S, Schulz S, Bärtsch P. Impairment of cation transport in A549 cells and rat alveolar epithelial cells by hypoxia. *Am J Physiol (Lung Cell Mol Physiol)* 1997;273 (17):L797-L806.
51. Nawroth PP, Bärtsch P, Kasperk C, Schöls W, Bode C, Werner M, Erdmann JC, Ziegler R. Thorakale Schmerzen bei einem Kraftsportler. *Internist* 1997;38:984-988.
52. Niebauer J, Hambrecht R, Velich T, Hauer K, Marburger C, Kälberer B, Weiss C, Schlierf G, Schuler G, Zimmermann R, Kübler W. Attenuated progression of coronary artery disease after 6 years of multifactorial risk intervention. *Circulation* 1997;96:2534-2541.
53. Hack V, Breitkreuz R, Kinscherf R, Röhrer H, Bärtsch P, Taut F, Benner A, Dröge W. The redox state as a correlate of senescence and wasting and as a target for therapeutic intervention. *Blood* 1998;92:59-67.
54. Maassen N, Foerster M, Mairbäurl H. Red blood cells do not contribute to removal of K⁺ released from exhaustively working forearm muscle. *J Appl Physiol* 1998;85(1):326-332.
55. Maggiorini M, Müller A, Hofstetter D, Bärtsch P, Oelz O. Assessment of acute mountain sickness by different score protocols in the Swiss Alps. *Aviat. Space Environ. Med.* 1998;69(12):1186-1192.
56. Steinacker JM, Tobias E, Menold E, Reißnecker S, Hohenhaus E, Liu Y, Lehmann M, Bärtsch P, and Swenson ER. Lung diffusing capacity and exercise in subjects with previous high altitude pulmonary edema. *Eur Respir J* 1998;11:643-650.
57. Strobel G, Reiß J, Friedmann B, Bärtsch P. Effect of repeated bouts of short-term exercise on plasma free and sulfoconjugated catecholamines in humans. *Eur J Appl Physiol* 1998;79:82-87.
58. Tschöp M, Strasburger CJ, Hartmann G, Biollaz J, Bärtsch P. Raised leptin concentrations at high altitude associated with loss of appetite. *Lancet* 1998;352:1119-1120. (Research Letter).
59. Weiss C, Seitel G, Bärtsch P. Coagulation and fibrinolysis after moderate and very heavy exercise in healthy male subjects. *Med Sci Sports Exerc* 1998;30:246-251.
60. Weiss C, Velich T, Niebauer J, Hauer K, Kälberer B, Kübler W, Bärtsch P. Activation of Coagulation and Fibrinolysis after Rehabilitative Exercise in Patients with Coronary Artery Disease. *Am J Cardiol* 1998;81:672-677.
61. Weiss C, Welsch B, Albert M, Friedmann B, Strobel G, Jost J, Nawroth P, Bärtsch P. Coagulation and thrombomodulin in response to exercise of different type and duration. *Med. Sci. Sports Exerc* 1998;30(8):1205-1210.
62. Weiss T, Eckstein H, Weiss C, Diehm C. Neutrophil function in peripheral arterial

occlusive disease effects of prostaglandin E₁. *Vascular Medicine* 1998;3:171-175.

63. Weiss T, Windhorst C, Weiss C, Kreuzer J, Bommer J, Kübler W. Acute effects of hemodialysis on cutaneous microcirculation in patients with peripheral arterial occlusive disease. *Nephrol Dial Transplant* 1998;13:2317-2321.
64. Weller E, Bachert P, Meinck HM, Friedmann B, Bärtsch P, Mairbäurl H. Lack of effect of oral Mg-supplementation on Mg in serum, blood cells and calf muscle. *Med Sci Sports Exerc* 1998;30(11):1584-1591.
65. Woitge HW, Friedmann B, Suttner S, Fahramand I, Müller M, Schmidt-Gayk H, Baertsch P, Ziegler R, Seibel M. Changes in bone turnover induced by aerobic and anaerobic exercise in young males. *J Bone Miner Res* 1998;13(12):1797-1804.
66. Baumgartner RW, Spyridopoulos I, Bärtsch P, Maggiorini M, Oelz O. Acute mountain sickness is not related to cerebral blood flow: a decompression chamber study. *J Appl Physiol* 1999;86:1578-1582.
67. Duplain H, Vollenweider L, Delabays A, Nicod P, Bärtsch P, Scherrer U. Augmented sympathetic activation during short-term hypoxia and high-altitude exposure in subjects susceptible to high-altitude pulmonary edema. *Circulation* 1999;99:1713-1718.
68. Friedmann B, Jost T, Rating T, Weller E, Werle E, Eckardt K-U, Bärtsch P, Mairbäurl H. Effects of iron supplementation on total body hemoglobin during endurance training at moderate altitude. *Int J Sports Med* 1999;20:78-85.
69. Sartori C, Lepori M, Busch T, Duplain H, Hildebrandt W, Bärtsch P, Nicod P, Falke KJ, Scherrer U. Exhaled nitric oxide does not provide a marker of vascular endothelial function in healthy humans. *Am J Resp Crit Care Med* 1999;160:879-882.
70. Sartori C, Vollenweider L, Löffler B-M, Delabays A, Nicod P, Bärtsch P, Scherrer U. Exaggerated endothelin release in high-altitude pulmonary edema. *Circulation* 1999;99:2665-2668.
71. Strobel G, Friedmann B, Siebold R, Bärtsch P. Effect of severe exercise on plasma catecholamines in differently trained athletes. *Med Sci Sports Exerc* 1999;31:560-565.
72. Bärtsch P, Eichenberger U, Ballmer PE, Gibbs JSR, Schirlo C, Oelz O, Mayatepek E. Urinary leukotriene E4 levels are not increased prior to high-altitude pulmonary edema. *Chest* 2000;117:1393.
73. Grünig E, Mereles D, Hildebrandt W, Swenson ER, Kübler W, Kuecherer H, Bärtsch P. Stress doppler echocardiography for identification of susceptibility to high altitude pulmonary edema. *J Am Coll Cardiol* 2000;35:980-987.
74. Hauer K, Niebauer J, Weiss C, Marburger C, Hambrecht R, Schlierf G, Schuler G,

Zimmermann R, Kübler W. Myocardial ischemia during physical exercise in patients with stable coronary artery disease: predictability and prevention. *Int J Cardiol* 2000;75:179-186.

75. Heberlein W, Wodopia R, Bärtsch P, Mairbäurl H. Possible role of ROS as mediators of hypoxia-induced ion transport inhibition of alveoloar epithelial cells. *Am J Physiol Lung Cell Mol Physiol* 2000;278:L640-L648.
76. Hildebrandt W, Ottenbacher A, Schuster M, Baisch F, Bärtsch P. Increased hypoxic ventilatory response during hypovolemic stress imposed through head-up-tilt and lower-body negative pressure. *Eur J Appl Physiol* 2000;81:470-478.
77. Hildebrandt W, Ottenbacher A, Schuster M, Swenson E, Bärtsch P. Diuretic effect of hypoxia, and hyperpnea in humans: relation to hormones and O₂ chemosensitivity. *J Appl Physiol* 2000;88:599-610.
78. Mairbäurl H, Schulz S, Hoffmann JF. Cation transport and cell volume changes in maturing rat reticulocytes. *Am J Physiol Cell Physiol* 2000;279:C1621-C1630.
79. Weiss C, Regele S, Velich T, Bärtsch P, Weiss T. Hemostasis and fibrinolysis in patients with intermittent claudication: effects of prostaglandin E1. *Prostaglandins, Leukotrienes and Essential Fatty Acids* 2000;63:271-277.
80. Wodopia R, Koo HS, Billian J, Wiesner R, Bärtsch P, Mairbäurl H. Hypoxia decreases proteins involved in epithelial electrolyte transport in A549 cells and rat lung. *Am J Physiol Lung Cell Mol Physiol* 2000;279:L1110-L1119.
81. Böttiger BW, Möbes S, Glätzer R, Bauer H, Gries A, Bärtsch P, Motsch J, Martin E. Astroglial protein S-100 is an early and sensitive marker of hypoxic brain damage and outcome after cardiac arrest in humans. *Circulation* 2001;103:2694-2698.
82. Busch T, Bärtsch P, Pappert D, Grünig E, Hildebrandt W, Elser H, Falke KJ, Swenson ER. Hypoxia decreases exhaled nitric oxide in mountaineers susceptible to high-altitude pulmonary edema. *Am J Resp Crit Care Med* 2001;163:368-373.
83. Friedmann B, Weller E, Mairbäurl H, Bärtsch P. Effects of iron repletion on blood volume and performance capacity in young athletes. *Med Sci Sports Exerc* 2001;33:741-746.
84. Hauer K, Rost B, Rütschle K, Opitz H, Specht N, Bärtsch P, Oster P, Schlierf G. Exercise training for rehabilitation and secondary prevention of falls in geriatric patients with a history of injurious falls. *J Am Geriatr Soc* 2001;49:10-20.
85. Heinicke K, Wolfarth B, Winchenbach P, Biermann B, Schmid A, Huber G, Friedmann B, Schmidt W. Blood volume and hemoglobin mass in elite athletes of different disciplines. *Int J Sports Med* 22:504-512, 2001.
86. Imoberdorf R, Garlick PJ, McNurlan MA, Casella GA, Peheim E, Turgay M, Bärtsch P, Ballmer PE. Enhanced synthesis of albumin and fibrinogen at high

altitude. J Appl Physiol 2001;90:528-537.

87. Papen M, Wodopia R, Bärtsch P, Mairbäurl H. Hypoxia-effects on Ca_i and Ca_i -dependent ion transport of lung alveolar epithelial cells. Cell Physiol Biochem 2001;11:187-196.
88. Bärtsch P, Schneider M. Evaluation der universitären sportmedizinischen Einrichtungen in Deutschland. Dtsch Z Sportmed 2002;53 (11):307-311.
89. Bärtsch P, Swenson ER, Paul A, Jülg B, Hohenhaus E. Hypoxic ventilatory response, ventilation, gas exchange, and fluid balance in acute mountain sickness. High Alt Med Biol 2002;3:361-76.
90. Baumgartner RW, Bärtsch P. Ataxia in acute mountain sickness does not improve with short-term oxygen inhalation. High Alt Med Biol 2002;3:283-92.
91. Baumgartner RW, Eichenberger U, Bärtsch P. Postural ataxia at high altitude is not related to mild to moderate acute mountain sickness. Eur J Appl Physiol 2002;86:322-326.
92. Dehnert C, Hütler M, Liu Y, Menold E, Netzer C, Schick R, Kubanek B, Lehmann M, Böning D, Steinacker JM. Erythropoiesis and performance after two weeks of living high and training low in well trained athletes. Int J Sports Med 2002;23:561-566.
93. Dehnert C, Weymann J, Montgomery HE, Woods D, Maggiorini M, Scherrer U, Gibbs JSR, Bärtsch P. No association between high-altitude tolerance and the ACE I/D gene polymorphism. Med Sci Sports Exerc 2002;34:1928-1933.
94. Hauer K, Specht N, Schuler M, Bärtsch P. Intensive physical training in geriatric patients after severe falls and hip surgery. Age and Ageing 2002;31:49-57.
95. Hildebrandt W, Alexander S, Bärtsch P, Dröge W. Effect on N-acetyl-cysteine on the hypoxic ventilatory response (HVR) and erythropoietin (EPO) production. – Linkage between plasma thiol redox state and O_2 chemosensitivity. Blood 2002;99:1552-1555.
96. Mairbäurl H, Mayer K, Kim K-J, Borok Z, Bärtsch P, Crandall ED. Hypoxia decreases active Na transport across primary rat alveolar epithelial cell monolayers. Am J Physiol Lung Cell Mol Physiol 2002;282:L659-L665.
97. Schneider M, Bernasch D, Weymann J, Holle R, Bärtsch P. Acute mountain sickness: influence of susceptibility, pre-exposure and ascent rate. Med Sci Sports Exerc 2002;34:1886-1891.
98. Strobel G, Haussmann R, Bärtsch P. Effect of differently induced plasma norepinephrine increment on norepinephrine sulfate formation. Life Sci 2002;71:55-65.

99. Swenson E, Maggiorini M, Mongovin S, Gibbs JSR, Greve I, Mairbäurl H, Bärtsch P. Pathogenesis of high-altitude pulmonary edema: Inflammation is not an etiologic factor. *JAMA* 2002;287:2228-2235.
100. Utiger D, Eichenberger U, Bernasch D, Baumgartner RW, Bärtsch P. Transient minor improvement of high altitude headache by sumatriptan. *High Alt Med Biol* 2002;3:387-93.
101. Weiss C, Bierhaus A, Kinscherf R, Hack V, Luther T, Nawroth PP, Bärtsch P. The tissue factor dependent pathway is not involved in exercise-induced activation of coagulation in PBMC. *J Appl Physiol* 2002;92:211-218.
102. Weiss T, Fischer D, Hausmann D, Weiss C. Endothelial function in patients with peripheral vascular disease – influence of prostaglandin E1. *Prostaglandins Leukot Essent Fatty Acids* 2002;67:277-281.
103. Bailey DM, Bärtsch P, Cooper MA. Electron paramagnetic resonance spectroscopic evidence of increased free radical generation and selective damage to skeletal muscle following lightning injury. *High Alt Med Biol* 2003;4(3):281-9.
104. Baumgartner RW, Keller S, Regard M, Bärtsch P. Flunarizine in prevention of headache, ataxia, and memory deficits during decompression to 4559 m. *High Alt Med Biol* 2003;4(3):333-9.
105. Friedmann B, Kinscherf R, Borisch S, Richter G, Bärtsch P, Billeter R. Effects of low-resistance/high-repetition strength training in hypoxia on muscle structure and gene expression. *Pflugers Arch - Eur J Appl Physiol* 2003;446:742-751.
106. Hauer K, Pfisterer M, Schuler M, Bärtsch P, Oster P. Two years later: A prospective long-term follow-up of a training intervention in geriatric patients with a history of severe falls. *Arch Phys Med Rehabil* 2003;84(10):1426-1432.
107. Mairbäurl H, Schwöbel F, Hoschele S, Maggiorini M, Gibbs S, Swenson ER, Bärtsch P. Altered ion transporter expression in bronchial epithelium in mountaineers with high-altitude pulmonary edema. *Journal of Applied Physiology* 2003;95(5):1843-50.
108. Mairbäurl H, Weymann J, Möhrlein A, Swenson ER, Maggiorini M, Gibbs JSR, Bärtsch P. Nasal epithelium potential difference at high altitude (4,559 m). *Am J Respir Crit Care Med* 2003;167:862-867.
109. Weiss C, Egermann M, Weiss T, Bärtsch P. Exercise-induced activation of coagulation in thrombophilia. *J Thromb Haemost* 2003;1:1312-3.
110. Weiss J, Haefeli WE, Gasse C, Hoffmann MM, Weymann J, Gibbs S, Mansmann U, Bärtsch P. Lack of evidence for association of high altitude pulmonary edema and polymorphisms of the NO pathway. *High Alt Med Biol* 2003;4:355-366.
111. Bärtsch P, Bailey DM, Berger MM, Knauth M, Baumgartner RW. Acute mountain

sickness: Controversies and advances. *High Alt Med Biol* 2004;5(2):110-124.

112. Bailey DM, Kleger GR, Holzgraefe M, Ballmer PE, Bärtsch P. Pathophysiological significance of peroxidative stress, neuronal damage, and membrane permeability in acute mountain sickness. *J Appl Physiol* 2004;96:1459-1463.
113. Friedmann B, Bauer T, Menold E, Bärtsch P. Exercise with the intensity of the individual anaerobic threshold in acute hypoxia. *Med Sci Sports Exerc* 2004;36(10):1737-42.
114. Friedmann B, Kinscherf R, Vorwald S, Müller H, Kucera K, Borisch S, Richter G, Bärtsch P, Billeter R. Muscular adaptations to computer-guided strength training with eccentric overload. *Acta Physiol Scand* 2004;182:77-88.
115. Karle C, Gehrig T, Wodopia R, Höschele S, Kreye VA, Katus HA, Bärtsch P, Mairbäurl H. Hypoxia-induced inhibition of whole cell membrane currents ion transport of A549 cells. *Am J Physiol Lung Cell Mol Physiol* 2004;31(4):L1154-L1160.
116. Weiss C, Egermann M, Bärtsch P. Exercise-induced activation of coagulation in subjects with APC resistance. *Blood Coagul Fibrinolysis* 2004;15:317-321.
117. Berger MM, Hesse C, Dehnert C, Siedler H, Kleinbongard P, Bardenheuer HJ, Kelm M, Bärtsch P, Haefeli WE. Hypoxia impairs systemic endothelial function in individuals prone to high-altitude pulmonary edema. *Am J Respir Crit Care Med* 2005;172:763-767.
118. Dehnert C, Grünig E, Mereles D, von Lennep N, Bärtsch P. Identification of individuals susceptible to high-altitude pulmonary oedema at low altitude. *Eur Respir J* 2005;25:545-551.
119. Friedmann B, Frese F, Menold E, Kauper F, Jost J, Bärtsch P. Individual variation in the erythropoietic response to altitude training in elite junior swimmers. *Br J Sports Med* 2005;39:148-153.
120. Friedmann B, Frese F, Menold E, Bärtsch P. Individual variation in the reduction of heart rate and performance at lactate thresholds in acute normobaric hypoxia. *Int J Sports Med* 2005;26(7):531-36.
121. Heerlein K, Schulze A, Hotz L, Bärtsch P, Mairbäurl H. Hypoxia decreases cellular ATP demand and inhibits mitochondrial respiration of A549 cells. *Am J Respir Cell Mol Biol* 2005;32:44-51.
122. Meissner T, Friedmann B, Okun JG, Schwab MA, Otonkoski T, Bauer T, Bärtsch P, Mayatepek E. Massive insulin secretion in response to anaerobic exercise in exercise-induced hyperinsulinism. *Horm Metab Res* 2005;37:690-694.

123. Pesce C, Leal C, Pinto H, Gonzalez G, Maggiorini M, Schneider M, Bärtsch P. Determinants of acute mountain sickness and success on Mount Aconcagua (6962 m). *High Alt Med Biol* 2005;6(2):158-66.
124. Streit M, Göggelmann C, Dehnert C, Burhenne J, Riedel KD, Menold E, Mikus G, Bärtsch P, Haefeli WE. Cytochrome P₄₅₀ enzyme-mediated drug metabolism at exposure to acute hypoxia (corresponding to an altitude of 4,500 m). *Eur J Clin Pharmacol* 2005;61:39-46.
125. VanOsta A, Moraine JJ, Mélot C, Mairbäurl H, Maggiorini M, Naeije R. Effects of high altitude exposure on cerebral hemodynamics in normal subjects. *Stroke* 2005;36(3):557-560.
126. Weiss C, Bierhaus A, Nawroth PP, Bärtsch P. Effects of supplementation with □-lipoic acid on exercise-induced activation of coagulation. *Metabolism Clinical and Experimental* 2005;54:815-820.
127. Bailey DM, Roukens R, Knauth M, Kallenberg K, Christ S, Mohr A, Genius J, Storch-Hagenlocher B, Meisel F, McEweny J, Young IS, Steiner T, Hess K, Bärtsch P. Free radical-mediated damage to barrier function is not associated with altered brain morphology in high-altitude headache. *J Cereb Blood Flow Metab* 2006;26(1):99-111.
128. Dehler M, Zessin E, Bärtsch P, Mairbäurl H. Hypoxia causes permeability oedema in the constant-pressure perfused rat lung. *Eur Respir J* 2006;27:600-606.
129. Dehnert C, Risse F, Ley S, Kuder TA, Buhmann R, Puderbach M, Menold E, Mereles D, Kauczor H-U, Bärtsch P, Fink C. Magnetic resonance imaging of uneven pulmonary perfusion in hypoxia in humans. *Am J Respir Crit Care Med* 2006;174:1132-1138.
130. Imoberdorf R, Garlick PJ, McNurlan MA, Casella GA, Marini JC, Turgay M, Bärtsch P, Ballmer PE. Skeletal muscle protein synthesis after active or passive ascent to high altitude. *Med Sci Sports Exerc* 2006;6:1082-1087.
131. Lehmann T, Mairbäurl H, Pleisch B, Maggiorini M, Bärtsch P, Reinhart WH. Platelet count and function at high altitude and in high-altitude pulmonary edema. *J Appl Physiol* 2006;100:690-694.
132. Maggiorini M, Brunner-La Rocca H-P, Peth S, Fischler M, Böhm T, Bernheim A, Kiencke S, Bloch KE, Dehnert C, Naeije R, Lehmann T, Bärtsch P, Mairbäurl H. Both tadalafil and dexamethasone may reduce the incidence of high-altitude pulmonary edema. *Ann Intern Med* 2006;145:497-506.
133. Peth S, Karle C, Dehnert C, Bärtsch P, Mairbäurl H. K⁺ channel activation with minoxidil stimulates nasal-epithelial ion transport and blunts exaggerated hypoxic pulmonary hypertension. *High Alt Med Biol* 2006;7(1):54-63.

134. Schoonman GG, Sandor PS, Agosti RM, Siccoli M, Bartsch P, Ferrari MD, Baumgartner RW. Normobaric hypoxia and nitroglycerin as trigger factors for migraine. *Cephalalgia* 2006;26(7):816-9.
135. Walter B, Weiss C, Dorsch M, Bartsch P. Exercise-induced fibrin formation is enhanced in women using third-generation oral contraceptives. *J Thromb Haemost* 2006;4:898-9. (Research Letter)
136. Weiss C, Walter B, Dorsch MF, Bartsch P. Fibrinolytic response to exercise in women using third-generation oral contraceptives. *Blood Coagul Fibrinolysis* 2006 Oct;17(7):563-8.
137. Bauer R, Dehnert C, Schoene P, Filusch A, Bärtsch P, Borst MM, Katus HA, Meyer FJ. Skeletal muscle dysfunction in patients with idiopathic pulmonary arterial hypertension. *Respir Med* 2007;101:2366-2369.
138. Bernheim AM, Kiencke S, Fischler M, Dorschner L, Debrunner J, Mairbäurl H, Maggiorini M, Brunner-La Rocca HP. Acute changes in pulmonary artery pressures due to exercise and exposure to high altitude do not cause left ventricular diastolic dysfunction. *Chest* 2007;132:380-387.
139. Friedmann B, Frese F, Menold E, Bärtsch P. Effects of acute moderate hypoxia on anaerobic capacity in endurance-trained runners. *Eur J Appl Physiol* 2007;101:67-73.
140. Güney S, Schuler A, Ott A, Höschele S, Zügel S, Baloglu E, Bärtsch P, Mairbäurl H. Dexamethasone prevents transport inhibition by hypoxia in rat lung and alveolar epithelial cells by stimulating activity and expression of $\text{Na}^+ \text{-K}^+$ -ATPase and epithelial Na^+ channels. *Am J Physiol Lung Cell Mol Physiol* 2007;293:L1332-L1338.
141. Kallenberg* K, Bailey* DM, Christ S, Mohr A, Roukens R, Menold E, Steiner T, Bartsch P*, Knauth M*. Magnetic resonance imaging evidence of cytotoxic cerebral edema in acute mountain sickness. *J Cereb Blood Flow Metab* 2007;27:1064-1071.
 * contributed equally
142. Tadibi V, Dehnert C, Menold E, Bärtsch P. Unchanged anaerobic and aerobic performance after short-term intermittent hypoxia. *Med Sci Sports Exerc* 2007;39:858-864.
143. Andrassy M, Volz HC, Igwe JC, Funke B, Eichberger SN, Kaya Z, Buss S, Autschbach F, Pleger ST, Lukic IK, Bea F, Hardt SE, Humpert PM, Bianchi ME, Mairbäurl H, Nawroth PP, Remppis A, Katus HA, Bierhaus A. High-mobility box-1 in ischemia-reperfusion injury of the heart. *Circulation* 2008;117:3216-3226.
144. Hähnel S, Stippich C, Weber I, Darm H, Schill T, Jost J, Friedmann B, Heiland S, Blatwo M, Meyding-Lamadé U. Prevalence of cerebral microhemorrhages in

amateur boxers as detected by 3 T MR imaging. Am J Neuroradiol 2008;26:388-391.

145. Kallenberg K*, Dehnert C*, Dörfler A, Schellinger PD, Bailey DM, Knauth M*, Bärtsch P*. J Cereb Blood Flow Metab. Microhemorrhages in nonfatal high-altitude cerebral edema 2008;28:1635-1642.
* contributed equally
146. Kaufmann BA, Bernheim AM, Kiencke S, Fischler M, Sklenar J, Mairbäurl H, Maggiorini M, Brunner-La Rocca HP. Evidence supportive of impaired myocardial blood flow reserve at high altitude in subjects developing high-altitude pulmonary edema. Am J Physiol Heart Circ Physiol 2008; 294:H1651-H1657.
147. Kuni B, Cárdenas-Montemayor E, Bangert Y, Friedmann-Bette B, Moser MT, Rupp R, Schmitt H. Altered force ratio in unanticipated side jumps after treadmill run. Clin J Sport Med 2008;18:415-422.
148. Lossnitzer D, Amann M, Zugck C, Katus H, Bärtsch P, Weiss C. Exercise-induced hemostatic activation in patients with dilated cardiomyopathy in sinus rhythm. Blood Coagul Fibrinolysis 2008;19:146-152.
149. Baloglu E, Ke A, Abu-Taha IH, Bärtsch P, Mairbäurl H. In vitro hypoxia impairs beta 2 adrenergic receptor signaling in primary rat alveolar epithelial cells. Am J Physiol Lung Cell Mol Physiol 2009; 296 L500-L509.
150. Berger MM, Dehnert C, Bailey DM, Luks AM, Menold E, Castell C , Schendler G, Faoro V, Mairbäurl H, Bärtsch P, et al. Transpulmonary plasma ET-1 and nitrite differences in high altitude pulmonary hypertension. High Alt Med Biol 2009;10:17-24.
151. Berger MM, Rozendahl CS, Schieber C, Dehler M, Zügel S, Bardenheuer HJ, Bärtsch P, Mairbäurl H. The effect of endothelin-1 on alveolar fluid clearance and pulmonary edema formation in the rat. Anesth Analg 2009; 108:225-231.
152. Fischler M, Maggiorini M, Dorschner L, Debrunner J, Bernheim A, Kiencke S, Mairbäurl H, Bloch KE, Naeije R, Brunner-La Rocca HP. Dexamethasone but not Tadalafil improves exercise capacity in adults prone to High Altitude Pulmonary Edema. Am J Resp Crit Care Med 2009, in press; doi:10.1164/rccm.200808-1348OC.

II. Übersichtsartikel

1. Maggiorini M, Bärtsch, P, Ritter M, Waber U, Mairbäurl H, Ferrazzini G, Kriemler S, Oelz O. Die akute Bergkrankheit, Pathophysiologie und Therapie. Hospitalis 1991;61:293-297.
2. Mairbäurl H, Hoffmann JE. Na/K-pump activity and cell volume changes during maturation of rat reticulocytes. In: Kaplan J, DeWeer P, eds. The sodium pump: recent developments. New York: The Rockefeller University Press 1991:453-456.
3. Weicker H, Jost J, Strobel G. Adrenergenes System und körperliche Belastung. In: Schulte KL, ed. Kardiales Risiko im Sport: Steinkopf-Verlag;1991:17-33.
4. Weicker H, Strobel G, Jost J. Bedeutung der sulfokonjugierten Plasmakatecholamine. In: Bennett P, Jeschke D, ed. Sport und Medizin - Pro und Contra. München: Zuckschwerdt-Verlag;1991:484-489.
5. Werle E, Strobel G, Fiehn W, Weicker H. Katecholaminerge Beeinflussung des Adenylatzyklasesystems im Rattenherzen durch kurzzeitige erschöpfende Maximalbelastung. In: Bennett P, Jeschke D. Sport und Medizin - Pro und Contra. München: Zuckschwerdt-Verlag;1991:490-493.
6. Bärtsch P. Fibrinbildung - nicht Ursache, sondern Folge des Höhenlungenödems. Fortschr Med. 1992;10:177-178.
7. Bärtsch P. Treatment of high altitude diseases without drugs. Int J Sports Med. 1992;13:S71-S74.
8. Bärtsch P. Wer wird bergkrank? Schweiz Med Wochenschr. 1992;122:307-314.
9. Jost J, Friedmann B, Jalak R., Weiss M. Medizinische Leistungsdiagnostik im Basketball. Deutscher Basketball-Bund, Hrsg. Basketball heute und in der Zukunft in Schule, Hochschule und Verein: Hoffmann-Schondorf-Verlag; 1992.
10. Oelz O, Maggiorini M, Ritter M, Noti C, Waber U, Vock P, Bärtsch P. Pathophysiologie, Prophylaxe und Therapie des Höhenlungenödems. Schweiz Med Wochenschr. 1992; 122:1151-1158.
11. Weicker H, Strobel G, Jost J, Hack V. Metabolische und kardiovaskulatorische adrenerge Regulation. Prakt Sporttraumatologie Sportmedizin. 1992;8:26-36.
12. Bärtsch P. Klinik und Pathophysiologie der Höhenkrankheiten. Ther Umsch. 1993;50:216-220.
13. Bärtsch P, Oelz O, eds. Bergsteigen, Trekking, Tauchen. Ther Umsch. 1993; 50:Heft 4 (April).

14. Bärtsch P, Shaw S, Weidmann P, Oelz O. Schützt Trinken vor Bergkrankheit. Schweiz Z Sportmed. 1993;41:7-13.
15. Oelz O, Maggiorini M, Bärtsch P. Advances in the pathophysiology, prophylaxis and treatment of high altitude pulmonary edema. Jap J Mountain Med. 1993;13:13-22.
16. Bärtsch, P. High altitude pulmonary edema. Excerpta Medica 1994;3:3-8.
17. Mairbäurl H. Red blood cell function in hypoxia at altitude and exercise. Int J Sports Med. 1994;15:51-63.
18. Jost J, Dorsch M, Hettinger M. Sportmedizinische Leistungsdiagnostik im Basketball. TW Sport u Med. 1995;7(3):160-168.
19. Bärtsch P. Aktuelle Aspekte der Höhenmedizin. Sportorthop - Sporttraumatol. 1997;13:77-80.
20. Bärtsch P. High Altitude Pulmonary Edema. Respiration. 1997;64:435-443.
21. Friedmann B, Bärtsch P. Höhentraining: Sinn, Unsinn, Trends. Orthopäde 1997;26:987-992.
22. Bärtsch P, ed. Sportmedizin. Ther Umsch. 1998;55:Heft 4 (April) .
23. Bärtsch P, Mairbäurl H, Friedmann B. Pseudoanämie durch Sport. Ther Umsch. 1998;55:251-255.
24. Friedmann B, Bärtsch P. Möglichkeiten und Grenzen des Höhentrainings im Ausdauersport. Leistungssport 1999; 29:43-48.
25. Bärtsch P. High altitude pulmonary edema. Med Sci Sports Exerc 1999;31:S23-S27.
26. Bärtsch P. Höhenkrankheiten. Dtsch Z Sportmed 2000;50(12):396-400.
27. Bärtsch P. Höhenanpassung. Dtsch Z Sportmed 2000;51(4):139-140.
28. Bärtsch P, Grünig E, Hohenhaus E, Dehnert C. Beurteilung der Höhentauglichkeit beim Gesunden. Dtsch Z Sportmed 2000;50(12):401-406.
29. Friedmann B. Entwicklungen im Höhentraining: Trends und Fragen. Dtsch Z Sportmed 2000;51(12):418-423.
30. Mairbäurl H. Höhenakklimatisation. Dtsch Z Sportmed 2000;50(12):390-395.
31. Steinacker JM, Liu Y, Bärtsch P. Höhenaufenthalt bei Patienten mit kardiovaskulären Krankheiten. Dtsch Z Sportmed 2000;50(12):407-411.
32. Bärtsch P, Grünig E, Hohenhaus E, Dehnert C. Assessment of high altitude

tolerance in healthy individuals. High Alt Med Biol 2:287-295, 2001.

33. Friedmann B. Standards der Sportmedizin: Sportleranämie. Dtsch Z Sportmed 2001;52 (9): 262-263.
34. Pollard A, Niermeyer S, Barry P, Bärtsch P, et al. Children at high altitude: An international consensus statement by an ad hoc committee of the International Society for Mountain Medicine, March 12, 2001. High Alt Med Biol 2:389-403, 2001.
35. Maggiorini M, Swenson ER, Bärtsch P. Das Höhenlungenödem. Intensivmed 2002;39:321-326.
36. Mairbäurl H, Maassen N. Ionenhomöostase, Muskelkontraktilität und muskuläre Ermüdung. Dtsch Z Sportmed 2002;53:238-243.
37. Bärtsch P, Mairbäurl H, Swenson ER, Maggiorini M. High altitude pulmonary oedema. Swiss Med Wkly 2003;133:377-84.
38. Dehnert C, Schneider M, Mairbäurl H, Bärtsch P. Wie Sie Bergsteiger vor den Folgen des "Höhenrauschs" bewahren. MMW-Fortschr.Med. 2003;8:33-35.
39. Höschele S, Mairbäurl H. Alveolar flooding at high altitude: Failure of reabsorption? News Physiol Sci 2003;18:55-9.
40. Weiss C, Bärtsch P. Aktivierung der Blutgerinnung und Fibrinolyse durch körperliche Belastung. Dtsch Z Sportmed 2003;54(5):130-135.
41. Berger MM, Bärtsch P. Höhenkrankheiten. MMP 2004;27(11):368-372.
42. Bärtsch P. Pulsoximetrie und akute Bergkrankheit. Flug- und Reisemedizin 2005;12(44):22-23.
43. Bärtsch P, Mairbäurl H, Maggiorini M, Swenson E. Physiological aspects of high-altitude pulmonary edema. J Appl Physiol 2005;98:1101-1110.
44. Dehnert C, Bärtsch P. Diagnostik metabolischer Myopathien. Dtsch Z Sportmed 2005;56(6):179-180.
45. Mairbäurl H. Regelung der Genexpression im Muskel bei Belastung. Dtsch Z Sportmed 2006;57(3):61-7.
46. Mairbäurl H. Role of alveolar epithelial sodium transport in high altitude pulmonary edema (HAPE). Respiratory Physiology & Neurobiology 2006;151 :178-91.
47. Bärtsch P, Gibbs JSR. Effect of altitude on the heart and the lungs. Circulation 2007;116:2191-2202.

48. Dehnert C, Berger MM, Mairbäurl H, Bärtsch P. High altitude pulmonary edema: A pressure-induced leak. *Respir Physiol Neurobiol* 2007;158:266-273.
49. Friedmann B. Neuere Entwicklungen im Krafttraining. Muskuläre Anpassungsreaktionen an verschiedene Kraftrainingsmethoden. *Dtsch Z Sportmed* 2007;58:12-18.
50. Bärtsch P. Fußball und Höhe, Zusammenfassung der Ergebnisse eines Konsensus Meetings. *Dtsch Z Sportmed* 2008;59:206-7.
51. Bärtsch P, Dehnert C, Friedmann-Bette B, Tadibi V. Intermittent hypoxia at rest for improvement of athletic performance. *Scand J Med Sci Sports Exerc* 2008;18(Suppl. 1):50-6.
52. Bärtsch P, Dvorak J, Saltin B., guest eds. Special Issue: Football and Altitude. Copenhagen: Blackwell Munksgaard; 2008. *Scand J Med Sci Sports*; v. 18(Suppl.1):1-99.
53. Bärtsch P, Saltin B. General introduction to altitude adaptation and mountain sickness. *Scand J Med Sci Sports* 2008;18(Suppl. 1):1-10.
54. Bärtsch P, Saltin B, Dvorak J. Consensus statement on playing football at different altitude. *Scand J Med Sci Sports* 2008;18(Suppl. 1):96-9.
55. Falkowski G, Bärtsch P, Bloch W, Dimeo F, Reimers CD, Schmitt H, Striegel H, Steinacker JM. Die Deutsche Sportmedizin im Jahr 2007. *Dtsch Z Sportmed* 2008;59:255-62.
56. Friedmann-Bette B. Classical altitude training. *Scand J Med Sci Sports* 2008;18(Suppl. 1):11-20.

III. Editorials, Case Reports, Letters

1. Bärtsch P. Akute Bergkrankheit und Höhenlungenödem. Dtsch Med Wochenschr 1993;118:1463-1464.
2. Bärtsch P. Höhenaufenthalt im Säuglingsalter. Dtsch Med Wochenschr 1993;118:681-682.
3. Bärtsch P, Maggi S, Kleger GR, Ballmer PE, Baumgartner RW. Sumatriptan for high-altitude headache. Lancet 1994;344:1445.
4. Gunga HC, Frommhold M, Hildebrandt W, Kirsch K, Röcker L. Erythropoietin production during flights with pressurized aircraft. Lancet 1996;348:416.
5. Jenzer G, Bärtsch P. Migraine with aura at high altitude - a report. J Wildern Med 1993;4:412-415.
6. Oelz O, Noti C, Ritter M, Jenni R, Bärtsch P. Nifedipine for high altitude pulmonary oedema. Lancet 1991;337:556.
7. Pollard AJ, Murdoch DR, Bärtsch P. Children in the mountains. Br Med J 1998;316:874-875.
8. Bärtsch P. Platelet activation with exercise and risk of cardiac events. Lancet 1999;354:1747-1748. (Commentary)
9. Bärtsch P. Lawinengefahr im Wintersport. Dtsch Z Sportmed 1999;50:72. (Editorial)
10. Bärtsch P. Höhenmedizin. Dtsch Z Sportmed 2000;51(12):389 (Editorial).
11. Bärtsch P, Schneider M. Same ascent rates must be used to assess effectiveness of different doses of acetazolamide (Letter). BMJ 2001;322:48.
12. Bärtsch P, Straub PW, Haeberli H. Hypobaric hypoxia (Letter). Lancet 2001;357:955.
13. Bärtsch P. High altitude medicine: Impacts for anesthesia? (Editorial). Anästhesiol Intensivmed Notfallmed Schmerzther 2001;36:296-297.
14. Bärtsch P. The (Western) European perspective of high altitude medicine (Editorial). High Alt Med Biol 2002;3:249-51.
15. Bärtsch P, Maggiorini M, Mairbäurl H, Vock P, Swenson E. Pulmonary extravascular fluid accumulation in climbers (Letter). Lancet 2002;360:571.
16. Bärtsch P, Mairbäurl H. Salmeterol for the prevention of high-altitude pulmonary edema (Letter). N Engl J Med 2002;347:1283.

17. Kreutzberger R, Streit M, Borisch S, Friedmann B, Bärtsch P. Case Report: Thermoregulation in a patient with anhydrosis due to aplasia of sweat glands. *Int J Sports Med* 2002;23(Suppl. S2):S127.
18. Weiss C, Egermann M, Bärtsch P. Enhanced exercise-induced activation of coagulation in a young athlete with anticardiolipin antibodies (case report). *Int J Sports Med* 2002;23(Suppl. S2):S122.
19. Bärtsch, P. Wieviel Laktat braucht die Gesundheit? *Dtsch Z Sportmed* 2004;55:89.
20. Mairbäurl H, Mason N, Bärtsch P. Nasal potentials at high altitude. *Eur Respir J* 2005;25:394-395.
21. Bärtsch P. How thrombogenic is hypoxia? *JAMA* 2006;295(19):2297-2299.
22. Keslacy S, Mazzeo RS, Giussani DA, Thakor AS, Insalaco G, Bonsignore MR, Rodriguez FA, Mark KS, Reboul S, Tanguy S, , Schaffer L, Marti HH, Gamboa A, Gamboa JL, Wehrlein J, Grover RF, **Friedmann B**, Martin DT, Hahn AG, Brooks GA, Schmidt W, Wolfarth B. Commenary on point-counterpoint "Positive effects of intermittent hypoxia (live high:train low) on exercise performance are/are not mediated primarily by augmented red cell volume". *J Appl Physiol* 2006;100:363-70.
23. Dehnert C, Bärtsch P, Grünig E, Mereles D. High-altitude pulmonary edema and patent foramen ovale. *JAMA* 2007;297:1432.
24. Friedmann B. Training in hypoxia – detrimental for muscle aerobic capacity? *Acta Physiol Scand* 2007;190:177.
25. Bärtsch P, Dvorak J, Saltin B. Football at high altitude. *Scand J Med Sci Sports* 2008;18(Suppl. 1):iii-iv.
26. Kiencke S, Bernheim A, Maggiorini M, Fischler M, Aschkenasy SV, Dorschner L, Debrunner J, Bloch K, Mairbäurl H, Brunner-La Rocca HP. Exercise-induced pulmonary artery hypertension. *J Am Coll Cardiol* 2008;51:513-514.
27. Urhausen A, Friedmann-Bette B, Dörr B, Meyer T, Wolfarth B, Thormann S. Stellungnahme zu den Therapeutischen Ausnahmegenehmigungen der Nationalen Antidoping-Agentur (NADA). *Dtsch Z Sportmed* 2008;59(4):98-99.

IV. Kongressbeiträge

1. Bärtsch, P.; Shaw, S.; Weidmann, P.; Franciolli, M.; Maggiorini, M., and Oelz, O. Aldosterone, antidiuretic hormone and atrial natriuretic peptide in acute mountain sickness. Sutton, J. R. and Coates, G., (Hrsg.). Hypoxia and Mountain Medicine. Burlington, VT: Queen City Press; 1992; pp. 73-81.
2. Baumgartner, R. W.; Bärtsch, P.; Maggiorini, M.; Thomi, A., and Oelz, O. The role of cerebral blood flow in acute mountain sickness. In: Sutton, J. Coates G. Hypoxia and Mountain Medicine. Burlington, VT: Queen City Press; 1992; pp. 252-259.
3. Bärtsch, P. High altitude pulmonary edema: Blood coagulation. Sutton, J. R.; Houston, C. S., and Coates, G., ed. Hypoxia and molecular medicine. Burlington: Queen City Printers Inc; 1993; pp. 252-258. ISBN: 0-9612246-1-4.
4. Bärtsch, P.; Müller, A.; Hofstetter, D.; Maggiorini, M.; Vock, P., and Oelz, O. AMS and HAPE scoring in the Alps. Sutton, J. R.; Houston, C. S., and Coates, G., (Hrsg.). Hypoxia and molecular medicine. Burlington: Queen City Press; 1993; pp. 265-271. ISBN: 0-9612246-1-4.
5. Hack, V.; Strobel, G., and Weicker, H. Der Einfluß von Belastung und Training auf die Aktivität neutrophiler Granulozyten bei Langstreckenläufern. Tittel, K.; Arndt, K. H., and Hollmann, W., Hrsg. Sportmedizin: gestern - heute - morgen. Leipzig, Berlin, Heidelberg: Verlag Johann Ambrosius Barth; 1993; 28 pp. 217-220.
6. Roach, R. C.; Bärtsch, P.; Hackett, P. H., and Oelz, O. The Lake Louise acute mountain sickness scoring system. Sutton, J. R.; Houston, C. S., and Coates, G., ed. Hypoxia and molecular medicine. Burlington: Queen City Printers Inc; 1993; pp. 272-274. ISBN: 0-9612246-1-4.
7. Strobel, G.; Hack, V.; Bärtsch, P., and Weicker, H. Verhalten der Katecholamine bis 2 h nach einer erschöpfenden Laufbandbelastung. Tittel, K.; Arndt, K. H., and Hollmann, W., Hrsg. Sportmedizin: gestern - heute - morgen. Berlin, Leipzig, Heidelberg: Verlag Johann Ambrosius Barth; 1993; 28 pp. 193-197.
8. Vock, P.; Fischer, H., and Bärtsch, P. Radiomorphology of high altitude pulmonary edema: New views. Sutton, J. R.; Houston, C. S., and Coates, G., ed. Hypoxia and molecular medicine. Burlington: Queen City Printers Inc; 1993; pp. 259-264. ISBN: 0-9612246-1-4.
9. Bärtsch, P. Akute Bergkrankheit und Höhenlungenödem. Kongreßband des 33. Deutschen Sportärztekongresses Liesen, H.; Weiß, M.; Krahl, H., and Uhlenbruck, G., Hrsg. Paderborn: Deutscher Ärzte-Verlag; 1994; pp. 948-951.
10. Friedmann, B.; Jost, J.; Weiss, M.; Albert, M.; Welsch, B. F., and Bärtsch, P. Ermittlung der Belastungsintensität für einstündige erschöpfende

Ausdauerbelastungen bei Triathleten. Liesen, H.; Weiß, M., and Baum, M., Hrsg. Regulations- und Repairmechanismen. 33. Deutscher Sportärztekongreß Paderborn 1993. Köln: Deutscher Ärzte-Verlag GmbH; 1994; pp. 179-182.

11. Hack, V.; Gießer, R.; Jost, J.; Welsch, B. F.; Albert, M., and Bärtsch, P. Einfluß von langandauernder Belastung auf die Dichte und Aktivität der β -Adrenorezeptoren auf Lymphozyten. Liesen, H.; Weiß, M., and Baum, M., Hrsg. Regulations- und Repairmechanismen. 33 Deutscher Sportärztekongreß Paderborn 1993. Köln: Deutscher Ärzte-Verlag GmbH ; 1994; pp. 561-563.
12. Kaiser, R.; Dietz, K., and Grunze, M. Leistungsphysiologie bei Rollstuhlsportlern - Kennzeichen erfolgreicher Rollstuhlbasketballer. Liesen, H; Weiß, M., and Baum, M., Hrsg. Regulations- und Repairmechanismen. 33. Deutscher Sportärztekongreß Paderborn 1993. Köln: Deutscher Ärzte-Verlag GmbH; 1994; pp. 40-42.
13. Strobel, G.; Albert, M.; Welsch, B., and Bärtsch, P. Verhalten der Katecholamine und Katecholaminsulfate im Plasma nach einem Triathlonwettkampf. Liesen, H.; Weiß, M., and Baum, M., Hrsg. Regulations- und Repairmechanismen. 33. Deutscher Sportärztekongreß Paderborn 1993. Köln: Deutscher Ärzte-Verlag GmbH; 1994; pp. 558-560
14. Volk, G. and Weiß, M. Verhalten von ANP in Relation zu anderen regulativen Hormonsystemen bei verschiedenen Belastungsformen an Land und im Wasser. Liesen, H.; Weiß, M., and Baum, M., Hrsg. Regulations- und Repairmechanismen. 33. Deutscher Sportärztekongreß Paderborn 1993. Köln: Deutscher Ärzte-Verlag GmbH; 1994; pp. 584-586.
15. Bärtsch, P.; Paul, A.; McCullough, R. E.; Kücherer, H., and Hohenhaus, E. Hypoxic ventilatory response and hypoxic pulmonary vascular response in HAPE-susceptible subjects. In: Sutton, J. R.; Houston, C. S., and Coates, G. Hypoxia and the brainBurlington: Queen City Printers; 1995: 265-270.
16. Bärtsch, P.; Paul, A.; McCullough, R. E.; Kücherer, H., and Hohenhaus, E. Hypoxic ventilatory response and hypoxic pulmonary vascular response in HAPE-susceptible subjects. Sutton, J. R.; Houston, C. S., and Coates, G., ed. Hypoxia and the brain. Burlington, VT: Queen City Printers; 1995; pp. 265-270.
17. Ballmer, P. E.; Kleger, G.-R.; Imoberdorf, R.; Manke, H. G.; Geiser, T., and Bärtsch, P. Transcapillary escape rate of albumin at high altitude. In: Sutton, J. R.; Houston, C. S., and Coates, G., eds. Hypoxia and the brainBurlington, VT: Queen City Printers; 1995: 235-242.
18. Scherrer, E.; Vollenweider, L.; Delabays, A.; Nicod, P., and Bärtsch, P. Microneurography in HAPE. In: Sutton, J. R. Houston C. S. Coates G., eds. Hypoxia and the brainBurlington, VT: Queen City Printers; 1995: 271-276.
19. Weicker, H. and Strobel, G. Endocrine regulation of metabolism during exercise. In: Ward, S. A. and Steinacker, J., Hrsg. The physiology and pathophysiology of

exercise tolerance. London: Plenum Press; 1996; pp. 113-123.

20. Bärtsch P, Swenson ER, Maggiorini M. Update: High altitude pulmonary edema. In: Roach RC, Wagner PD, and Hackett PH, eds. Hypoxia: From Genes to the Bedside. New York: Kluwer Plenum Academic; 2001. pp. 89-106. (Adv Exp Biol Med series; vol. 502).
21. Bärtsch P, Maggiorini M, Swenson ER. Update on high altitude pulmonary edema. In: Viscor G, Ricart A, Leal C, eds. Health & Height - Proceedings of the 5th World Congress on Mountain Medicine and High Altitude Physiology. Barcelona: Publicacions de la Universitat de Barcelona; 2003. pp. 23-30.
22. Grünig E, Dehnert C, Mereles D, Koehler R, Olszewski H, Bärtsch P, Janssen B. Enhanced hypoxic pulmonary vasoconstriction in families of adults or children with idiopathic pulmonary arterial hypertension. 47th Annual Thomas L. Petty Lung Conference: Cellular and Molecular Pathobiology of Pulmonary Hypertension. Chest 2005;128(6 Suppl):630S-633S.
23. Mairbäurl H, Hotz L, Chaudhuri N, Heelein K, Bärtsch P. Oxygen- and flux dependence of ROS-formation of lung alveolar epithelial cells. Redl, H. 181-184. 2005. Bologna, Italy, Medimond S.r.l. European Shock Society (11th Congress). 27-1-2005.
24. **Bärtsch P, Dehnert C, Mairbäurl H**, Berger MM. Who gets high altitude pulmonary edema and why? In: Aldashev A, Naeije R, eds. Problems of high altitude medicine and biology. Springer; 2007, pp. 185-95.

V. Buchbeiträge

1. **Bärtsch P.** Calciumantagonisten bei Höhenkrankheit. In: Kübler W. and Tritthart HA, eds. Calciumantagonisten. Darmstadt: Steinkopf; 1996:355-363.
2. **Bärtsch P.** Höhenkrankheit. In: Nawroth P, Lasch HG, eds. Vaskuläre Medizin systematisch. Bremen: UNI-MED Verlag AG; 1999:424-428.
3. **Bärtsch P.**, Roach R. Acute mountain sickness and high-altitude cerebral edema. In: Hornbein TF, Schoene R, eds. High altitude - an exploration of human adaptation. New York: Marcel Dekker Inc.; 2001. pp. 731-776 . (Lenfant C, exec. ed. Lung biology in health and disease; v. 161).
4. Grover RF, **Bärtsch P.** Blood. In: Hornbein TF, Schoene RB, eds. High altitude - an exploration of human adaptation. New York: Marcel Dekker Inc.; 2001. pp. 493-523. (Lenfant, C, exec. ed. Lung biology in health and disease; v. 161).
5. **Mairbäurl H.** Kapitel 14 in: Horst de Mares: Sportphysiologie (Verlag Sport & Buch Strauß), 2002.
6. **Bärtsch P.**, Johannsen BN, Leppäläluoto J. Physical activity and environment. In: Kjær,M. et al., eds. Textbook of Sports Medicine. Malden, USA: Blackwell Science Ltd., 2003: 226-249.
7. Maggiorini M, **Bärtsch P.** High altitude, high-altitude pulmonary edema and the pulmonary circulation. In: Peacock AJ, Rubin LJ, eds. Pulmonary circulation: Diseases and their treatment. London: Arnold; 2004: 541-551.
8. **Mairbäurl H.** Exercise and the alveolar and bronchial epithelial cell. In: Mooren VC, Völker K, eds. Molecular and cellular exercise physiology. Champaign: Human Kinetics; 2004:289-298.
9. Steffny H, **Friedmann B.**, Keller M. Marathontraining für Frauen. Südwestverlag, München, 2006.
10. **Friedmann B.** Individuelle Variabilität in der Reaktion auf Höhentraining. Olympia-Magazin. Die Zeitung für den Olympiastützpunkt Rhein-Neckar e. V., 2. Ausgabe 2006.
11. **Friedmann B.** Neue Aspekte im Krafttraining. Sport-Journal. Zeitschrift des Landessportverbandes Baden-Württemberg e. V. August 2006.
12. **Friedmann B.** Individuelle Variabilität in der Reaktion auf Höhentraining. Olympia-Magazin. Die Zeitung für den Olympiastützpunkt Rhein-Neckar e. V., 2. Ausgabe 2006.

13. Steffny H, **Friedmann B**, Keller M. Marathontraining für Frauen. Südwestverlag, München, 2006.
14. **Bärtsch P, Dehnert C, Mairbaurl H**, Berger MM. Who gets high altitude pulmonary edema and why? In: Aldashev A, Naeije R, eds. Problems of high altitude medicine and biology. Springer; 2007, pp. 185-95.
15. Nieß AM, Dickhuth HH, **Friedmann B**, Kindermann W, Urhausen A. Medizinischer Ratgeber Peking 2008. Bonn: Bundesinstitut für Sportwissenschaft/Deutscher Olympischer Sportbund; 2007.
16. **Friedmann, B.** Höhentraining zur Erhöhung des O₂-Transfers. In: Verbotene Methode - Erhöhung des Sauerstofftransfers. Schriftenreihe des Bundesinstituts für Sportwissenschaft. Leipzig: Leipziger Verlagsanstalt GmbH; 2008. pp. 43-53.

VI. Habilitationen

1. Mairbäurl, H. Regelung des Na/K/Cl-Cotransports und des Zellvolumens in Erythrozyten. Heidelberg: Universität Heidelberg; 1995.
2. Friedmann, B. Hypoxie als Trainingsreiz: Auswirkungen auf Erythropoese, Muskelstruktur und Leistungsfähigkeit. Heidelberg: Universität Heidelberg; 2005.
3. Hildebrandt W. Flüssigkeitsverschiebungen und Kreislaufregulation unter Gravitationseinfluss (Faktoren der orthostatischen Toleranz unter Berücksichtigung von Ausdauertraining, Immobilisation und Schwerelosigkeit). Habilitationsschrift zur Erlangung der Lehrbefähigung für das Fach Physiologie an der Deutschen Sporthochschule Köln.

VII. Dissertationen

1. Bircher, H. P. Relationship of mountain sickness to physical fitness and exercise intensity during ascent: Medizinische Fakultät der Universität Bern; 1994.
2. Blunschi, K. Kältediurese. Die Bedeutung des atrialen natriuretischen Peptids. Bern: Medizinische Fakultät der Universität Bern ; 1994.
3. Dorsch, M. Energiestoffwechsel bei Basketballspielerinnen in Training und Wettkampf. Paderborn. Betreuer: Prof.Dr. med. M. Weiß.
4. Eckes, S. Untersuchungen zum Ionentransport von Lungenepithelzellen in Hypoxie: Universität Heidelberg; 1995. Betreuer: H. Mairbäurl.
5. Heidmann, M. Laufbandergometrische Untersuchungen zur Frage der Nützlichkeit sulfatierter und freier Katecholamine aus Thrombozyten für die Beurteilung der Belastungsintensität und Beanspruchung des sympathoadrenergen Systems bei längerdauernden körperlichen Belastungen. Heidelberg: Universität Heidelberg; 1996. Betreuer: Dr.sc.hu. G. Strobel.
6. Hofstetter, D. Behandlung der akuten Bergkrankheit mit Überdruck. Bern: Medizinische Fakultät der Universität Bern; 1994. Betreuer: Prof.Dr.med P. Bärtsch.
7. Merki, B. Treatment of acute mountain sickness by simulated descent: a randomised controlled trial. Bern: Medizinische Fakultät der Universität Bern; 1994.Betreuer: Prof.Dr.med. P. Bärtsch.
8. Mielke, K. Die Rolle der humanen Thrombozyten für die Plasmaspiegel der Katecholamine und ihrer Sulfokonjugate in vitro. Heidelberg: Universität Heidelberg; 1995. Betreuer: Dr.sc.hum. G. Strobel.
9. Neureither, M. Verhalten der freien und sulfatierten Plasmakatecholamine bei Belastung unter moderater Hypoxie: Universität Heidelberg. Betreuer: Dr.sc.hum. G. Strobel.
10. Volk, G. Der Einfluß verschiedener körperlicher Belastungsformen an Land und im Wasser auf die Freisetzung und Ausscheidung von Atrialen Natriuetischen Peptid, sowie Auswirkungen auf den Volumen-Elektrolythaushalt unter Berücksichtigung kardiovaskulatorischer, metabolischer und hormoneller Parameter. Heidelberg: Medizinische Fakultät der Universität Heidelberg; 1996. Betreuer: M. Weiß.
11. Welsch, B. F. Einfluß der Belastungsart und Belastungsdauer auf die Aktivierung der Blutgerinnung unter körperlicher Belastung. Heidelberg: Universität Heidelberg; 1996. Betreuer: Prof.Dr.med. P.Bärtsch.

12. André, P. Die Anfälligkeit zum Höhenlungenödem: Pulmonalarteriendruck und Atemregulation unter Hypoxie. Heidelberg: Medizinische Fakultät der Universität Heidelberg; 1997. Betreuer: P. Bärtsch.
13. Hauser, D. Bedeutung sulfatierter und freier Katecholamine im Plasma für die Beurteilung der Belastungsintensität und der Aktivierung des sympathoadrenergen Systems bei einstündiger Belastung. Heidelberg: Med. Fakultät der Universität Heidelberg; 1997. Betreuer: G. Strobel.
14. Siebold, R. Untersuchung zur Bestimmung der anaeroben Leistungsfähigkeit und zum Verhalten der sulfatierten Katecholamine bei anaerober Belastung. Heidelberg: Medizinische Fakultät der Universität Heidelberg; 1997. Betreuer: B. Friedmann.
15. Albert, M. Fibrinolyseparameter in Abhängigkeit von Belastungsform und Belastungsdauer. Heidelberg: Medizinische Fakultät der Universität Heidelberg, Abt. Sport- und Leistungsmedizin; 1998. Betreuer: Prof. Dr. med. P. Bärtsch.
16. Heberlein W. Die Rolle von Wasserstoffperoxid als Sauerstoffmessenger in Alveolareptihelzellen Typ II. Betreuer: H. Mairbäurl. 1999.
17. Jülg B. Wechselbeziehungen zwischen Salz- und Wasserhaushalt und Atemregulation unter hypoxischen Bedingungen. Betreuer: P. Bärtsch. 1999.
18. Reiß J. Plasmakonzentrationen von Katecholaminen als Parameter der Gesamtsympathikusaktivität bei hochintensiver intermittierender Belastung. Betreuer: G. Strobel. 1999.
19. Scheerer M. Kaliumtransport in Thrombozyten und mononuklearen Leukozyten: Indikator für eine Prädisposition von HAPE? Betreuer: H. Mairbäurl. 1999.
20. Weller E. Magnesiumhaushalt und Einflüsse der Magnesiumsupplementierung bei Magnesiummangel auf Plasma- und Zellmagnesium und die muskuläre Leistungsfähigkeit. Betreuer: H. Mairbäurl. 1999.
21. Bauder, K. Sympathoadrenerge Regulationsmechanismen auf Prärezeptor-, Rezeptor- und Postrezeptor-Ebene während 60-minütiger Ausdauerbelastungen auf einem Ruderergometer. Heidelberg: Medizinische Klinik und Poliklinik der Universität Heidelberg; 2000. Betreuer: Prof. Dr. M. Weiß.
22. Suttner, Stefan. Auswirkungen eines schtwöchigen spezifischen Trainings auf die aerobe und anaerobe Leistungsfähigkeit bei nicht spezifisch trainierten Freizeitsportlern. Betreuer: P. Bärtsch. 2000.
23. Weiss, C. Die belastungsinduzierte Gerinnungsaktivierung bei Personen mit und ohne erhöhte Thromboseneigung. Heidelberg: Universität Heidelberg; 2000.
24. Wodopia, R. Alveolärer Ionentransport. Heidelberg: Medizinische Klinik und Poliklinik der Universität Heidelberg; 2000. Betreuer: Priv.-Doz. Dr. phil. H.

Mairbäurl.

25. Papen, Marike. Effekte von Hypoxia auf Cai und den Ca-abhängigen Ionentransport in Alveolarepithelzellen Typ 2. Heidelberg 2001. Betreuer: H. Mairbäurl.
26. Bernasch, Dirke. Acute mountain sickness: Influence of susceptibility, pre-exposure and ascent rate. Medizinische Fakultät Universität Bern 2002. Betreuer: P. Bärtsch.
27. Bilian, Javiera. „Untersuchung einer möglichen Internalisierung von Membranproteinen bei Hypoxieexposition in Alveolarepithelzellen Typ II.“ Heidelberg 2002. Betreuer: H. Mairbäurl.
28. Egermann, Marcus. Blutgerinnung und Fibrinolyse unter Belastung bei Resistenz auf aktiviertes Protein C. Heidelberg 2002. Betreuer: P. Bärtsch.
29. Frese, Falko. Individuelle Tauglichkeit für Höhentraining. Heidelberg 2002. Betreuer: B. Friedmann.
30. Schmidt, Silke. Hämostase und Fibrinolyse bei Patienten mit peripherer arterieller Verschlusskrankheit: Effekte von Prostaglandin E1. Heidelberg 2002. Betreuer: C. Weiss.
31. Ottenbacher, Andy. Analyse der frühen hypoxischen Diurese. Heidelberg 2002. Betreuer: P. Bärtsch.
32. Höschele, S. In vitro und in vivo Einflüsse von Hypoxie auf den Ionentransport in der Lunge. Heidelberg 2003. Betreuer: H. Mairbäurl.
33. Heerlein, Kristin. Spirometrie einzelner Zellen: Anpassung von Alveolarepithelzellen an Hypoxie. Heidelberg: Universität Heidelberg; 2004. Betreuer: Prof. Dr. phil H. Mairbäurl.
34. Weymann, Jörn. Assoziation von Akuter Bergkrankheit mit dem Insertions - Deletions - Polymorphismus im Angiotensin - Converting - Enzym Gen. Heidelberg 2004. Betreuer: P. Bärtsch.
35. Brislow, Anna. Effekte von Hypoxie auf die cAMP-abhängige Signaltransduktion am Modell des Na/K/2Cl-Cotransporters in A549 Zellen. Heidelberg 2005. Betreuer: H. Mairbäurl.
36. Hotz, L. Zelluläre Bildung reaktiver Sauerstoffspezies in Abhängigkeit des Sauerstoff-Partialdrucks. 2006; Universität Heidelberg. Betreuer: H. Mairbäurl.
37. Peth, S. Einfluss des K-Kanal-Öffners Minoxidil auf pulmonalarteriellen Druck und Ionentransport am Atemwegsepithel während acuter, normobarer Hypoxie. 2006; Universität Heidelberg. Betreuer: H. Mairbäurl.
38. Schwöbel, F. Veränderte Expression und Aktivität von Na/K-ATPase, epithelialen

Na-Kanälen und CFTR beim Höhenlungenödem. 2006; Universität Heidelberg.
Betreuer: H. Mairbäurl.

39. Tadibi V. Effects of short-term intermittent hypoxic exposure on aerobic and anaerobic performance. 2006; Universität Heidelberg. Betreuer: P. Bärtsch.
40. Chaudiri, Nondini. Mitochondriale Bildung reaktiver Sauerstoffspezies in Abhängigkeit vom Sauerstoffpartialdruck und der mitochondrialen Aktivität. 2007; Universität Heidelberg. Betreuer: H. Mairbäurl.
41. Gehrig, Tobias. Mögliche Änderung der mRNA-Expression von Na-Transportern in alveolarepithelzellen durch Hemmung von Kaliumkanälen in Hypoxie. 2007; Universität Heidelberg. Betreuer: H. Mairbäurl.
42. Schmidt, Laurenz. Ionentransport im Atemwegsepithel bei belastungsinduziertem Asthma und cystischer Fibrose. 2008. Universität Heidelberg. Betreuer: Prof. Dr. phil. H. Mairbäurl.

VIII. Magisterarbeiten

1. Kaufmann, J. Leistungsdiagnostik: Vergleich der Ergebnisse der Laufbandirotergometrie mit einem Feldtest: Heidelberg. Betreuerin: Dr. med. B Friedmann.
2. Polus, Y. Überprüfung der Validität des portablen Spirometriegerätes X1. Heidelberg: Universität Heidelberg; 1996. Betreuerin: Dr. med. B. Friedmann.
3. Eberth, F. Vergleich zwischen Feldstufentest und Laufbandstufentest mittels portabler Spiroergometrieeinheit. Heidelberg: Institut für Sport und Sportwissenschaft der Universität Heidelberg; 1998. Betreuer: B. Friedmann.
4. Ortlieb, E. Leistungsdiagnostik im Kanurennspor: Vergleichbarkeit der Maximalleistung und Schwellenwert im Feldtest und bei Spiroergometrien auf dem Kanu- und Handkurbelergometer. Heidelberg: Institut für Sport und Sportwissenschaft der Universität Heidelberg; 1998. Betreuer: Friedmann, B..
5. Rütschle, K. Kraft- und Koordinationstraining bei über 75jährigen Frauen nach schwerem Sturz. Heidelberg: Institut für Sport und Sportwissenschaft der Universität Heidelberg; 1998. Betreuer: P. Bärtsch.
6. Oppel A. Einfluss standardisierter Trainingsprogramme auf die Grundlagenausdauer bei jugendlichen Tennisspielern. Betreuer: B. Friedmann. 1999.

IX. Diplomarbeiten

1. Eberspächer, S. Einfluß der Stufendauer auf die lineare Abhängigkeit zwischen Laufbandgeschwindigkeit und Sauerstoffaufnahme. Heidelberg: Universität Heidelberg; 1994.
2. Körner, S. K. Die Rückrechnungsmethode als alternative Methode zur Bestimmung der maximalen Sauerstoffaufnahme. Heidelberg: Universität Heidelberg; 1994. Betreuer: Dr.med. E. Hohenhaus-Sievert.
3. Rupprecht, C. Die Rolle Erythrozyten bei der Kaliumelimination nach Belastung. Heidelberg: Universität Heidelberg; 1994. Betreuer: Dr. phil. H. Mairbäurl.
4. Wodopia, R. Natrium-Kanäle in Hypoxie. Heidelberg. Betreuer: PD Dr. phil. H. Mairbäurl.
5. Günter S. Beurteilung des Motivationswertes von Patientenflyern anhand einer Nutzeranalyse; eine empirische Studie. 2008. Fachhochschule Nordhessen. Betreuer: Prof. Dr. Irene Burtchen.
6. Kristen, I.C. Möglichkeiten und Grenzen des körperlichen Trainings nach Herztransplantation. 2008. Fachhochschule Nordhessen. Betreuer: Prof. Dr. Irene Burtchen.

X. Kongreßband-Beitrag

1. Gunga, H. C.; Röcker, L.; Behn, C.; Hildebrandt, W.; Koralewski, E.; Schobersberger, K., and Klrsch, K. Erythropoietin and central venous pressure in high altitude shift workers. *Acta Andina*. 1997; 6((2)):178-189.

XI. Buch

1. Strobel, G. Katecholaminsulfate: Intermediate des Katecholaminstoffwechsels mit sportmedizinischer Bedeutung. Grupe 0, Heinemann K.; Lenk, H.; Lotz, F., and Weicker, H., Hrsg. Schorndorf: Verlag Karl Hofmann; 1991; 24.
2. Weiß, M. and Rieder, H. Sportmedizinische Forschung. Springer Verlag; 1991.
3. Weicker, H. and Strobel, G. Sport Medizin. Biochemisch-physiologische Grundlagen und ihre sportartspezifische Bedeutung. Stuttgart: Gustav Fischer Verlag; 1994.

XII. Abstracts

1. Maggiorini M, Bärtsch P, Oelz O. Elevated body temperature in severe acute mountain sickness (AMS). In: Sutton, J. R.; Coates, G., and Remmers, J. E. Hypoxia: The adaptations. Toronto, Philadelphia: B.C. Decker Inc.;1990.
2. Maggiorini M, Ritter M, Waber U, Bärtsch P, Oelz O. Electrocardiographic changes at high altitude. In: Sutton, J. R.; Coates, G., and Remmers, J. E. Hypoxia: The adaptations. Toronto, Philadelphia: B C Decker Inc;1990.
3. Jost J, Weiß M, Weicker H. Basal and exercise induced adaptations of adrenoceptors, catecholamines and metabolism in oars men during the high intensive training period and the following competition period. Int J Sports Med. 1991;12:951.
4. Keck, W.; Weiß, M., and Weicker, H. Hyperammonemia during exercise, an effect of glycogen depletion. Int J Sports Med. 1991; 12:99.
5. Maggiorini, M.; Bärtsch, P., and Oelz, O. Erhöhte Körpertemperatur bei akuter Bergkrankheit. Schweiz Med Wochenschr. 1991; 121(Suppl. 38):33.
6. Mairbäurl H. and Hoffmann, J. F. Na/K/CL-Cotransport activity in normal and shrunken human and ferret red cells is regulated by protein phosphorylation and dephosphorylation. Pflügers Arch. 1991; 419(R101):136.
7. Merki, B.; Kayser, B.; Maggiorini, M.; Oelz, O., and Bärtsch, P. Kontrollierte Studie über die Behandlung der akuten Bergkrankheit mit Überdruck. Schweiz Med Wochenschr. 1991; 121 (Suppl. 37):24.
8. Noti, C.; Ritter, M.; Maggiorini, M.; Oelz, O., and Bärtsch, P. Nifedipin verhindert die exzessive hypoxische pulmonalarterielle Hypertonie bei Anfälligkeit für das Höhenlungenödem. Schweiz Med Wochenschr. 1991; 121(Suppl 36):22.
9. Oelz, O.; Maggiorini, M.; Ritter, M.; Noti, C.; Vock, P., and Bärtsch, P. Prophylaxis of high altitude pulmonary edema with nifedipine. Clin Res. 1991; 39:178A.
10. Strobel, G.; Werle, E.; Helfinger, H., and Weicker, H. The catecholamine sulfates as intermediates of the catecholamine metabolism. Int J Sports Med. 1991; 12:94.
11. Werle, E.; Strobel, G.; Fiehn, W., and Weicker, H. Beta-adrenergic effects of acute exercise on rat myocardium adenylate cyclase. Int J Sports Med. 1991; 12:94.
12. Bärtsch, P.; Merki, B.; Kayser, B.; Maggiorini, M., and Oelz, O. Controlled trial of the treatment of acute mountain sickness (AMS) with a portable hyperbaric chamber. In: Sutton, J. R.; Coates, G., and Remmers, J. E. Hypoxia and mountain medicine . New York, Pergamon Press; 1992:299.

13. Eichenberger, U.; Waber, U.; Maggiorini, M.; Oelz, O., and Bärtsch, P. Acute high altitude illnesses are not related to periodic breathing and apneas during sleep. In: Sutton, J. R.; Coates, G., and Houston, C. S., ed. Hypoxia and mountain medicine. Oxford: Pergamon Press; 1992; p. 302.
14. Kriemler, S.; Maggiorini, M.; Bärtsch, P., and Oelz, O. Gas exchange in acute mountain sickness (AMS). Sutton, J. R. Coates G. Houston C. S. Hypoxia and Mountain Medicine. New York: Pergamon Press; 1992; p. 309.
15. Mairbäurl H. and Hoffmann, J. F. Na/K/Cl-cotransport in rat red blood cells of different cell age. *J Gen Physiol*. 1992; 100:57a-/115.
16. Mairbäurl H. and Hoffmann, J. F. Modification of the effect of DPG on HB-O₂-affinity during short term exposure to high altitude (4559m). In: Sutton, J. R.; Coates, G., and Houston, C. S., (Eds.). Hypoxia and Mountain Medicine. Burlington, VT: Queen City Press; 1992.
17. Strobel, G.; Tanzeem, A.; Isgro, F.; Hagl, S., and Weicker, H. Deconjugation of the catecholamine 4-sulfate isomers after coronary perfusion of the isolated pit heart. 7th International Catecholamine Symposium; 1992.
18. Strobel, G.; Weber, M.; Bärtsch, P.; Martin, E., and Hausmann. R. Chemical synthesis of 1-dopa 3-sulfate and 1-dopa 4-sulfate. 7th International Catecholamine Symposium; 1992.
19. Weicker, H.; Hack, V., and Strobel, G. Interaction between hormones and immune system. 2nd International Congress of Behavioural Medicine; 1992.
20. Albert, M.; Welsch, B. F.; Friedmann, B., and Bärtsch, P. Fibrin formation after a two hour triathlon. *Int J Sports Med*. 1993.
21. Eichenberger, U.; Weiss, E.; Riemann, D.; Waber, U.; Maggiorini, M.; Oelz, O., and Bärtsch, P. Periodic breathing during sleep is not related to acute high altitude illnesses. *Int J Sports Med*. 1993.
22. Hack, V.; Strobel, G., and Weicker, H. Influence of exercise stress and training on the activity of neutrophilic granulocytes in long-distance runners. *Int J Sports Med*. 1993; 14:166.
23. Hohenhaus, E.; Goerre, S.; Niroomand, F.; Oelz, O., and Bärtsch, P. Nifedipine does not prevent acute mountain sickness. *Eur Respir J*. 1993; 6(Suppl. 17):S187.
24. Mairbäurl, H. Cell-volume dependent regulation of Na-transport in fermented cells. FEBS-advanced course on "Biochemistry of membrane transport"; Lake Baladon, Hungary. 1993.
25. Mairbäurl, H. Decrease in Na/k/Cl-cotransport capacity in maturing rat teticulocytes. 32nd Congres of the International Union of Physiological Sciences; Glasgow. 1993: 48-22-P.

26. Strobel, G.; Friedmann, B.; Hauser, D.; Heidmann, M.; Jost, J., and Bärtsch, P. Plasma norepinephrine sulfate reflects the overall sympathoadrenergic activity from exercise of 1 hour duration. *Int J Sports Med.* 1993;im Druck.
27. Strobel, G.; Hack, V.; Weicker, H., and Bärtsch, P. Behaviour of the catecholamine sulphate during the first two hours after an exhausting treadmill exercise. *Int J Sports Med.* 1993; 14:165.
28. Strobel, G.; Onasch, A.; Isgro, F.; Richter, J.; Tanzeem, A.; Saggau, W.; Hagl, S., and Bärtsch, P. Dopamine sulphate response to intravenous infusion of dopamine. *Cardiovasc Drugs Ther.* 1993; 7 (Suppl.) 2:448.
29. Welsch, B. F.; Albert, M.; Friedmann, B.; Jost, J.; Weiss, M., and Bärtsch, P. Thrombin formation by maxiaml exercise: Influence of exercise and intensity. *Int J Sports Med.* 1993;in press.
30. Wollert, H. G.; Isgro, F.; Hoffmann, J. F.; Haisch, G.; Strobel, G., and Saggau, W. Myocardial metabolism and hemodynamics after preischemic administration of phosphodiesterase inhibitor enoximone on open heart surgery. *Cardiovasc Drugs Ther.* 1993; 7(Suppl. 2):406.
31. Delabays, A.; Aebsicher, N.; Vollenweider, L.; Bärtsch, P., and Scherrer, U. Nitric oxide induced reduction of right ventricular volume and pulmonary arterial pressure at high altitude. *Circulation.* 1994.
32. Friedmann, B.; Jost, J.; Weiss, M.; Albert, M.; Welsch, B. F., and Bärtsch, P. Prediction of the intensity for a one-hour exhaustive exercise in triathletes. *Int J Sports Med.* 1994; 15:350.
33. Friedmann, B.; Siebold, R., and Bärtsch, P. Anaerobic capacity in sprint-trained and endurance-trained runners. *Eur J Appl Physiol.* 1994; 3:P84.
34. Hack, V.; Gießer, R.; Jost, J.; Weiss, M.; Welsch, B. F.; Albert, M., and Bärtsch, P. Effect of prolonged exercise on the density and function of β -adrenoceptors on lymphocytes. *Int J Sports Med.* 1994; 15:366.
35. Hohenhaus, E.; Paul, A., and Bärtsch, P. Hypoxic ventilatory response and gas exchange in acute mountain sickness. *Eur Respir J.* 1994; 7(18):200s.
36. Hohenhaus, E.; Paul, A.; McCullough, R. E.; Kücherer, H., and Bärtsch, P. Ventilatory and pulmonary vascular response to hypoxia and susceptibility to high altitude pulmonary edema. *Eur Respir J.* 1994; 18:S200.
37. Kaiser, R.; Dietz, K., and Grunze, M. Exercise testing in wheelchair athletes - characteristics of successful basketball players . *Int J Sports Med.* 1994; 15:343.
38. Kleger, G.-R.; Bärtsch, P., and Ballmer, P. E. Erhöhung von C-reaktivem Protein und Interleukin-6 bei akutem Höhenlungenödem. *Schweiz Med Wochenschr.* 1994; 59:S25.

39. Kücherer, H.; Paul, A.; Hohenhaus, E.; Bärtsch, P., and Kübler, W. Variabilität dopplersonographischer Parameter zur Bestimmung des Pulmonalarteriendruckes. *Z Kardiol.* 1994; 83:63.
40. Mairbäurl, H. Co-ordinated activation of Na/K/Cl-cotransport. *FASEB J.* 1994; 8/4:A20:116.
41. Reißnecker, S.; Tobias, P.; Liu, Y.; Bärtsch, P., and Steinacker, J. M. Cardiac output, diffusion capacity and dead space ventilation during exercise in normoxia and hypoxia measure by rebreathing technique. *Eur J Appl Physiol.* 1994; 3:S14.
42. Siebold, R.; Friedmann, B.; Bärtsch, P., and Strobel, G. Catecholamine sulfate response to exhausting supramaximal exercise. *Eur J Appl Physiol.* 1994; S18:45.
43. Strobel, G.; Albert, M.; Welsch, B. F., and Bärtsch, P. Plasma catecholamine and catecholamine sulfate response after a competitive triathlon. *Int J Sports Med.* 1994; 15:366.
44. Strobel, G.; Friedmann, B.; Jost, J., and Bärtsch, P. Plasma and platelet catecholamine and catecholamine sulfate response to various exercise tests. *Am J Physiol* 1994; 267:E537-543
45. Strobel, G.; Heitmann, M.; Hauser, D., and Bärtsch, P. Plasma catecholamine sulfate during exercise and following recovery. *Clin Sci* 1984.
46. Vollenweider, L.; Delabays, A.; Randin, A.; Nicod, P.; Bärtsch, P., and Scherrer, U. Exaggerated hypoxia-induced sympathetic activation in subjects susceptible to high altitude pulmonary edema. *Circulation.* 1994.
47. Bärtsch, P.; Jülg, B., and Hohenhaus, E. Urine volume in acute mountain sickness is not related to hypoxic ventilatory response (HVR). *Eur Respir J.* 1995; 8:62s.
48. Eichenberger, U.; Fickerle, T; Lourens, St.; Noelpp, U; Ritter, E. P., and Bärtsch, P. Effect of high altitude on lung perfusion measured by scintigraphy. In: Sutton, J. R.; Houston, C. S., and Coates, G., Eds. Hypoxia and the BrainBurlington: Queen City Printers Inc.; 1995: 321.
49. Fikrle, E. P.; Ritter, U.; Noelpp, St. L.; Bärtsch, P.; Eichenberger, U.; Rösler, H., and Kinser, J. Lungenperfusionsszintigraphie bei Bergsteigern auf 4559 m über dem Meer. *Nucl Med.* 1995; 34:A 148.
50. Gunga, H.-C.; Kirsch, K.; Hildebrandt, W., and Koralewski, E. Fluid distribution and tissue thickness changes in high altitude shift workers in the Andes (>3,600 m). In: Sutton, J. R.; Houston, C. S., and Coates, G. Hypoxia and the brainBurlington: Queen City Printers; 1995: 323.
51. Imoberdorf, R.; Bärtsch, P.; Turgay, M., and Ballmer, P. E. The exercise-induced increase in plasma volume at high altitude is not mediated by changes in colloidal-osmotic pressure or osmolality. *Eur J Clin Invest.* 1995; 25(Suppl. 2):A54.

52. Imoberdorf, R.; Bärtsch, P.; Turgay, M., and Ballmer, P. E. Plasma volume changes after active but not passive ascent to high altitude. In: Sutton, J. R.; Houston, C. S., and Coates, G. Hypoxia and the brainBurlington: Queen City Printers; 1995: 313.
53. Kirsch, K.; Baartz, P.; Funga, H. C.; Koralewski, E.; Whildebrandt, W., and Röcker, L. Fluid distribution along body axis of man during micor-g exposure, moderate and high altitude and long duration air transport. European Office of Aerospace Research and Development Department of Airforce, San Antonio, USA. 1995.
54. Maggiorini, M.; Merki, B.; Pallavicini, E.; Bärtsch, P., and Oelz, O. Acetazolamid and Almitrin bei Behandlung der akuten Bergkrankheit. Schweiz Med Wochenschr. 1995; 125, Suppl. 64:S855.
55. Maggiorini, M.; Merki, B.; Pallavicini, E.; Bärtsch, P., and Oelz, O. Acetazolamide and almitrine in acute mountain sickness (AMS) treatment. In: Sutton, J. R.; Houston, C. S., and Coates, G., eds. Hypoxia and the brainBurlington: Queen City Press; 1995: 330.
56. Mairbäurl, H. Cation transport by A549 and alveolar type II cells in normoxia and hypoxia. Pflügers Arch. 1995; 429:R57-179.
57. Strobel, G.; Mielke, K., and Bärtsch, P. Active uptake processes for norepinephrine and epinephrine in intact human platelets. FASEB J. 1995; J9:A635.
58. Vollenweider, L.; Delabays, A.; Kleger, G.-R.; Ballmer, P.; Nicod, P.; Bärtsch, P., and Scherrer, U. Inhaled nitric oxide for high-altitude pulmonary edema. In: Sutton, J. R.; Houston, C. S., and Coates, G., eds. Hypoxia and the BrainBurlington: Queen City Press; 1995: 342.
59. Vollenweider, L.; Savcic, M.; Löffler, B.-M.; Nicod, P.; Bärtsch, P., and Scherrer, U. Exaggerated Endothelin-1 release in high-altitude pulmonary edema susceptible subjects. Eur Respir J. 1995; 8:322s.
60. Weiss, C.; Seitel, G., and Bärtsch, P. Exercise induced fibrin formation is potentiated by protein C deficiency. Ann Haematol. 1995; 70:A2.
61. Weiss, C.; Welsch, B.; Albert, M.; Friedmann, B.; Jost, J.; Nawroth, P., and Bärtsch, P. Effects of endurance exercise on thrombin generation. Ann Haematol. 1995; 70:A2.
62. Bärtsch, P.; Haeberli, A.; Nanzer, A.; Lämmle, B.; Vock, P.; Oelz, O., and Straub, P. W. Blood coagulation in acute mountain sickness and high altitude pulmonary edema. Acta Andina. 1996; 5:29.
62. Bärtsch, P.; Seitel, G., and Weiss, C. Exercise-ynduced plasmin formation precedes fibrin formation. Int J Sports Med. 1996; 17:S8.
63. Bärtsch, P.; Walter, B., and Dorsch, M. Enhanced exercise-induced thrombin

- formation under oral contraception. *Med Sci Sports Exerc.* 1996; 28:S84.
64. Dorsch, M.; Walter, B., and Bärtsch, P. Enhanced exercise-induced thrombin and fibrin formation under oral contraception. *Ann Haematol.* 1996; 72:A8.
 65. Eckes, S.; Bärtsch, P., and Mairbäurl, H. Hypoxia inhibits the Na/K-pump and Ka/K₂Cl-cotransport in lung alveolar epithelial cells. *Pflügers Arch.* 1996; 431:R106/P-229.
 66. Friedmann, B.; Jost, J.; Rating, T.; Mairbäurl, H., and Bärtsch, P. No increase of total red blood cell volume during three weeks of training at an altitude of 1,800m. *Med Sci Sports Exerc.* 1996; 28:S67.
 67. Gunga, H.-C.; Behn, C.; Hildebrandt, W.; Koralewski, E.; Röcker, L., and Kirsch, K. Erythropoietin and central venous pressure in high altitude shift workers. *Acta Andina.* 1996; 5:75.
 68. Hack, V.; Weiss, C.; Friedmann, B.; Suttner, S.; Bärtsch, P., and Dröge, W. Effect of different types of training on lymphocytes subsets, plasma glutamate and intracellular glutathione concentration. *Int J Sports Med.* 1996; 17:S37.
 69. Hildebrandt, W.; Ottenbacher, A.; Baisch, F., and Bärtsch, P. Effects of postural changes and lower body negative pressure (LBNP) on the hypoxic ventilatory response (HVR): The role of intravascular volume shifts. *Acta Andina.* 1996; 5:10.
 70. Hildebrandt, W.; Ottenbacher, A., and Bärtsch, P. Analysis of the early hypoxic diuretic response: The effects of hypoxemia, hypocapnia and hyperpnea and the prediction by chemosensitivity. *The Physiologist.* 1996; 39:A53.
 71. Imoberdorf, E.; Garlick, P. J.; McNurlan, M. A.; Bärtsch, P.; Turgay, M., and Ballmer, P. E. Increase in muscle protein synthesis after active but not passive ascent to high altitude. *Eur J Clin Invest.* 1996; 26, suppl. 1:A333..
 72. Kleger, G.-R.; Roberts, L. J. II; Bärtsch, P., and Ballmer, P. E. Exposure to high altitude does not cause free radical mediated injury. *Eur J Clin Invest.* 1996; 26, suppl.1:A340.
 73. Levine, B. D.; Friedmann, B., and Stray-Gundersen, J. Confirmation of the "high-low" hypothesis: Living at altitude - training at sea level improves sea level performance. *Med Sci Sports Exerc.* 1996; 28:S124.
 74. Mairbäurl, H. and Bärtsch, P. Cation transport by alveolar epithelial cells in normoxia and hypoxia. *Eur J Clin Invest.* 1996; 26(suppl. 1):A 60-347.
 75. Neureither, M.; Bärtsch, P., and Strobel, G. Effect of acute mild hypoxia during submaximal exercise on plasma free and sulfoconjugated catecholamines. *Int J Sports Med.* 1996; 17:S26.
 76. Rupprecht, C.; Maassen, N., and Mairbäurl, H. Red cells do not contribute to the

- removal of K released from working muscle. *Int J Sports Med.* 1996; 17:S30.
- 77. Strobel, G.; Engelhardt, S., and Bärtsch, P. Metabolism of levo-[7-3H]-noradrenaline in human lung epithelial A549 cells. *Exp Neurol.* 1996;In press.
 - 78. Strobel, G.; Reiss, J.; Friedmann, B., and Bärtsch, P. Plasma norepinephrine sulfate response to different intermittent exercise tests performed at similar workloads. *Int J Sports Med.* 1996; 17:S31.
 - 79. Suttner, S.; Jost, J.; Bärtsch, P., and Friedmann, B. Effects of endurance vs. sprint training on aerobic and anaerobic capacity in leisure athletes. *Int J Sports Med.* 1996; 17:S17.
 - 80. Weiss, C.; Velich, T.; Hauer, K.; Zimmermann, R.; Kübler, W., and Bärtsch, P. Exercise induced hemostatic changes in patients with coronary artery disease. *Ann Hematol.* 1996; 72:A18.
 - 81. Weller, E.; Mairbäurl, H.; Bachert, P., and Bärtsch, P. Mg-supplementation of athletes does not increase skeletal muscle Mg. *Int J Sports Med.* 1996; 17:S40.
 - 82. Woitge, H. W.; Müller, M.; Bärtsch, P.; Seibel, M. J., and Ziegler, R. Physical activity increases bone formation and decreases bone resorption as assessed by biochemical markers of bone turnover. *Osteoporosis Int.* 1996; 6:PTU 671.
 - 83. Bärtsch, P.; Eichenberger, U.; Schirlo, C.; Pavlicek, C.; Gibbs, S.; Oelz, O., and Mayatapek, E. Urinary leukotriene E4 levels are not increased in high altitude pulmonary edema. In: C. Houston and G. Coates, Eds. Hypoxia, women at altitude. Proceedings of the 10th International Hypoxia Symposium at Lake Louise, Febr. 18-22, 1997: 314.
 - 84. Gibbs, J. S. R.; Schirlo, C.; Pavlicek, P.; Bartsch, P.; Koller, E.; Scherrer, U., and Oelz, O. High altitude pulmonary edema: differences in pulmonary artery pressure between susceptible and non-susceptible subjects in normoxia and hypoxia. *Circulation.* 1997; I:427.
 - 85. Grünig, E.; Mereles, D.; Hildebrandt, W.; Swenson, E.; Kücherer, H., and Bärtsch, P. Hypertensive pulmonary response to exercise and to hypoxia in subjects with prior high altitude pulmonary edema measured by stress echocardiography. *Circulation.* 1997; 96(8):I-427.
 - 86. Heberlein, W.; Wodopia, S.; Bärtsch, P., and Maibäurl, H. Possible role for H₂O₂ in the inhibition of cation transport of alveolar epithelial cells by hypoxia. *Pflügers Arch.* 1997; 433:R126/P-451.
 - 87. Hildebrandt, W.; Buclin, T.; Biollaz, J.; Swenson, E., and Bärtsch, P. Accentuated hypoxemia precedes impairment of gas exchange in subjects with AMS. In: Houston, C. S. and Coates, G. Hypoxia and Mountain Medicine: Women at Altitude. Proceedings of the 10th International Hypoxia symposium at Lake Louise, Febr. 18-22, 1997 ; 1997: A72/p31.

88. Imoberdorf, R.; Bärtsch, P.; Garlick, P. J.; McNurlan, M. A., and Turgay, M. The effects of physical exercise and high altitude exposure on muscle protein synthesis. In: C. Houston and G. Coates. Hypoxia, women at altitude. Proceedings of the 10th International Hypoxia Symposium at Lake Louise, febr. 18-22, 1997; 1997: 314.
89. Mairbäurl, H.; Eckes, S.; Schulz, R.; Wodopia, S., and Bärtsch, P. Impaired cation transport by lung alveolar epithelial cells in hypoxia. Crit Care Med. 1997; 155:A832.
90. Mairbäurl, H.; Wodopia, S., and Bärtsch, P. Effects of hypoxia and calcium on alveolar ion transport. Eur Respir J. 1997; 20:S134.
91. Strobel, G.; Weber, M.; Bärtsch, P.; Martin, E., and Hausmann, R. Effect of differently induced norepinephrine increments on norepinephrine sulfate in plasma. Med Sci Sports Exerc. 1997; 29:S201.
92. Wodopia, S.; Bärtsch, P., and Maibäurl, H. Hypoxia-mediated decrease of sodium transport and sodium channel protein in A549 cells. Pflügers Arch. 1997; 433:R44/O-124.
93. Busch, T.; Sartori, C.; Lepori, M.; Hildebrandt, W.; Pappert, D.; Bärtsch, P.; Falke, K. J., and Scherrer, U. Exhaled nitric oxide during infusion of L-NMMA and L-arginine. Am J Resp Crit Care Med. 1998; 157(3):A38.
94. Busch, T.; Swenson, E. R.; Grünig, E.; Hildebrandt, W.; Elser, H.; Pappert, D.; Bärtsch, B., and Falke, K. J. Exhaled nitric oxide during normoxia and prolonged hypoxia. Am J Resp Crit Care Med. 1998; 157(3):A228.
95. Egermann, M.; Wagner, S., and Bärtsch, P. Exercise-induced thrombin formation is not increased in trained healthy men with resistance to activated protein C. Int J Sports Med. 1998; 19:S33.
96. Friedmann, B.; Frese, F., and Bärtsch, P. Ergospirometry systems vs. Douglas bag method: evaluation of a laboratory device and a portable system. Int J Sports Med. 1998; 19:S23.
97. Hildebrandt, W.; Biollaz, J.; Buclin, T.; Swenson, E., and Bärtsch, P. Accentuated hypoxemia in acute mountain sickness: ventilatory and metabolic factors. Int J Sports Med. 1998; 19:S16.
98. 151. Mairbäurl, H; Wodopia, R., and Bärtsch, P. Effects of hypoxia and calcium on alveolar ion transport. Am J Resp Crit Care Med. 1998; 157(3):A847.
99. Mairbäurl, H.; Wodopia, S., and Bärtsch, P. Hypoxia inhibits ion transport by alveolar epithelial cells. Int J Sports Med. 1998; 19:S17.
100. Sartori, C.; Lepori, M.; Busch, T.; Bärtsch, P.; Nicod, P.; Falke, K. J., and Scherrer, U. Nitric oxide produced by the vascular endothelium does not contribute to

exhaled nitric oxide in humans. Am J Resp Crit Care Med. 1998; 157(3):A229.

101. Strobel, G.; Haußmann, R.; Weber, M., and Bärtsch, P. Effects of i.v. norepinephrine infusion and bycycle exercise on plasma norepinephrine and norepinephrine sulfate concentration. Int J Sports Med. 1998; 19:S42.
102. Strobel, G.; Siebold, R.; Friedmann, B.; Bärtsch, P., and Böning D. Effects of severe exercise on plasma catechomamine concentration differs between anaerobically and aerobically trained athletes. Int J Sports Med. 1998; 19:S43.
103. Tschöp, M.; Strasburger, J.; Hartmann, G.; Biollaz, J., and Bärtsch, P. Raised leptin concentrations at high altitude associated with loss of appetite. The Lancet. 1998; 352:1119.
104. Wagner, S.; Egermann, M.; Nawroth, P., and Bärtsch, P. Minimal alterations in serum concentration of leptin after exhaustive treadmill running. Int J Sports Med. 1998; 19:S52.
105. Weiss, C.; Velich, T.; Hauer, K.; Kübler, W., and Bärtsch, P. Activation of coagulation after rehabilitative exercise in patients with coronary artery disease. Int J Sports Med. 1998; 19:S14.
106. Weller, E.; Friedmann, B.; Rating, T.; Jost, J.; Maibäurl, H., and Bärtsch, P. Increased erythrocyte turnover through endurance training in top athletes of the national boxing team. Int J Sports Med. 1998; 19:S30.
107. Wodopia, R.; Ko, H. S.; Bärtsch, P., and Mairbäurl, H. Hypoxia-induced decrease of active Na-transport and Na-transport in alveolar epithelial cells and the intact rat lung. Am J Resp Crit Care Med. 1998; 157(3):A848.
108. Busch T, Hildebrandt, Senson ER, Grünig E, Elser H, Kaisers U, Bärtsch P. Autoinhalation of nasal nitric oxide improves arterial oxygenation during prolonged hypoxia. Am J Resp Crit Care Med. 1999; 159:A842.
109. Friedmann B, Weller E, Mairbäurl H, Bärtsch P. Effects of iron supplementation on blood volume and maximal performance in iron-deficient young athletes. Int J Sports Med 1999; 20:S21.
110. Heinicke K, Winchenbach P, Biermann B, Friedmann B, Schmid A, Heinrich L, Huber G, Schmidt W. Blood volume, hemoglobin mass, and hemoglobin concentration in endurance athletes of different disciplines. Int J Sports Med 1999;20(S1):S20.
111. Hildebrandt W, Schuster M, Hartmann M, Herzog W, Bärtsch P. Relation of AMS symptoms during normobaric hypoxia to personality traits. In: Roach RC, Wagner PD, Hackett PH, eds. Hypoxia: Into the Next Millennium. Kluwer/Academic Publishers. New York;1999:388.
112. Hildebrandt W, Schuster M, Hartmann M, Herzog W, Bärtsch P. Relation of

- symptoms of acute mountain sickness to personality traits. Int J Sports Med 1999; 20:S7.
113. Hildebrandt W, Schuster M, Hartmann M, Herzog W, Bärtsch P. Rise of erythropoietin during acute normobaric hypoxia is inversely related to the hypoxic ventilatory response. In: Roach RC, Wagner PD, Hackett PH, eds. Hypoxia: Into the Next Millennium. Kluwer/Academic Publishers. New York;1999:389.
114. Mairbäurl H, Heberlein W, Papen M, Wodopia R, Bärtsch P. H₂O₂ and CaI do not mediate the inhibition of ion transport of alveolar epithelial cells by hypoxia. Am J Resp Crit Care Med 1999; 159(3):A181.
115. Mairbäurl H, Heberlein W, Papen M, Wodopia R, Bärtsch P. Signaling by ROS and CAI does not mediate the transport inhibition of alveolar epithelial cells by hypoxia. In: Roach RC, Wagner PD, Hackett PH, eds. Hypoxia: Into the Next Millennium. Kluwer/Academic Publishers. New York;1999:409.
116. Mairbäurl H, Lytle C. Shrinkage and deoxygenation stimulate NKCC independent of Mg²⁺ in ferret red blood cells. FASEB Journal 1999;13:A716-56.7.
117. Mairbäurl H, Papen M, Wodopia R, Bärtsch P. Effects of hypoxia on Cai and Cai-dependent ion transport of lung alveolar epithelial cells. FASEB Journal 1999;13:A786-607.13.
118. Mairbäurl H, Scheerer M, Hildebrandt W, Bärtsch P. Altered ion transport of mononuclear leukocytes from HAPE susceptibles. In: Roach RC, Wagner PD, Hackett PH, eds. Hypoxia: Into the Next Millennium. Kluwer/Academic Publishers. New York;1999:409.
119. Papen M, Nobiling R, Wodopia R, Bärtsch P. Hypoxia-induced inhibition of ion transport of lung alveolar epithelial cells is not mediated by changes in Cai. Pflügers Arch Eur J Physiol 1999;437:R101-P10-11.
120. Utiger D, Bernasch D, Eichenberger U, Bärtsch P. Transient improvement of high altitude headache by sumatriptan in a placebo-controlled trial. Int J Sports Med 1999; 20:S8.
121. Utiger D, Bernasch D, Eichenberger U, Bärtsch P. Transient improvement of high altitude headache by sumatriptan in a placebo-controlled trial. In: Roach RC, Wagner PD, Hackett PH, eds. Hypoxia: Into the Next Millennium. Kluwer/Academic Publishers. New York;1999:435.
122. Weiss C, Bierhaus A, Hack V, Nawroth P, Bärtsch P. Exercise-induced activation transcription factor NF-κB. Int J Sports Med 1999; 20:S11.
123. Weiss C, Bierhaus A, Luther T, Nawroth P, Bärtsch P. Exercise-induced activation of coagulation is not initiated by tissue factor. Int J Sports Med 1999; 20:S11.
124. Weiss C, Bierhaus A, Luther T, Nawroth P, Bärtsch P. Exercise-induced activation

- of coagulation is not initiated by tissue factor. *Int J Sports Med* 1999;20:S11.
125. Weymann J, Bernasch D, Maggi S, Bärtsch P. Increased susceptibility to acute mountain sickness in individuals with migraine at low altitude. In: Roach RC, Wagner PD, Hackett PH, eds. Hypoxia: Into the Next Millennium. Kluwer/Academic Publishers. New York;1999:439.
 126. Weymann J, Gibbs S, Montgomery H, Bärtsch P. Acute mountain sickness (AMS) and angiotensin-converting enzyme (ACE) gene polymorphism. *Int J Sports Med* 1999; 20:S19.
 127. Wodopia R, Kreye VAW, Karle C, Bärtsch P, Mairbäurl H. Hypoxia-induced changes in membrane conductance of lung alveolar epithelial cells. *Pflügers Arch Eur J Physiol* 1999;437:R86-P5-8.
 128. Zessin E, Dehler M, Mairbäurl H, Bärtsch P. Terbutaline does not prevent hypoxia-induced edema formation in the isolated perfused lung. *Int J Sports Med* 1999; 20:S9.
 129. Zessin E, Dehler M, Seifert M, Mairbäurl H, Bärtsch P. The isolated rat lung as a model to link hypoxia induced pulmonary edema and impairment of epithelial ion fluid transport processes. *Am J Resp Crit Care Med* 1999; 159(3):A289.
 130. Zessin E, Dehler M, Seifert M, Schmeiser G, Mairbäurl H, Bärtsch P. Terbutaline does not prevent edema formation in severe hypoxia. *Eur Resp J* 1999;14:296s.
 131. Bärtsch P, Weymann J, Montgomery H, Gibbs S. Acute mountain sickness (AMS) and angiotensin-converting enzyme (ACE) gene polymorphism. *HAMB* 2000;1:227.
 132. Borisch S, Kucera K, Müller H, Erb G, Richter G, Bärtsch P, Friedmann B. Effects of weight resistance training vs. desmodromic training on muscle cross sectional area and strength. *Dtsch Z Sportmed* 2000, 51 (9).
 133. Friedmann B, Weller E, Mairbäurl H, Bärtsch P. Effects of iron repletion on red blood cell volume and exercise performance. *Med Sci Sports Exerc* 2000;32:S75.
 134. Maggiorini M, Swenson E, Mairbäurl H, Joller-Jemelka H, Gibbs S, Bärtsch P. Plasma interleukin-6 a marker of injury to the blood-gas barrier in high altitude pulmonary edema. *HAMB* 2000;1:252.
 135. Mairbäurl H, Heberlein W, Wodopia R, Bärtsch P. Are ROS mediators of hypoxic alveolar transport inhibition? *HAMB* 2000;1:252.
 136. Swenson E, Mongovin S, Gibbs S, Maggiorini M, Greve I, Mairbäurl H, Bärtsch P. Stress failure in high altitude pulmonary edema (HAPE). *Am J Resp Crit Care Med* 2000;161:A418.
 137. Weiss C, Bierhaus A, Hack V, Nawroth P, Bärtsch P. Activation of transcription factor NF- κ B by intensive physical exercise. *Ann Hematol* 2000;79(suppl):A20.

138. Weiss C, Bierhaus A, Nawroth P, Bärtsch P. Exercise-induced activation of coagulation is not affected by α -lipoic acid. *Med Sci Sports Exerc* 2000;32:S53.
139. Weymann J, Swenson E, Gibbs S, Maggiorini M, Bärtsch P, Mairbäurl H. Nasal epithelium Na- and Cl-conductance differences between controls and HAPE-susceptibles in normoxia and hypoxia. *Am J Resp Crit Care Med* 2000;161:A446.
140. Zessin E, Dehler M, Mairbäurl H, Bärtsch P. Effects of graded hypoxia on edema formation of the isolated perfused rat lung. *Am J Resp Crit Care Med* 2000;161:A446.
141. Bärtsch P. High altitude pulmonary edema (HAPE): Goals for further research (abstract). *High Alt Med Biol* 2001;2:82.
142. Bärtsch P, Siedler K, Kreutzberger R, Menold E, Weiss C. Acute normobaric hypoxia does not enhance exercise-induced thrombin formation (Abstract). *Med Sci Sports Exerc* 2001;33:S99.
143. Bärtsch P, Weiss C. Aktivierung der Blutgerinnung und Fibrinolyse durch körperliche Belastung. *Dtsch Z Sportmed* 2001;52:S18.
144. Borisch S, Bärtsch P, Friedmann B. Auswirkungen eines Kraftausdauertrainings in Hypoxie auf Leistungsfähigkeit, Blutvolumen und Erythropoetin. *Dtsch Z Sportmed* 2001;52:S88.
145. Dehnert C, Grünig E, Mereles D, Arnold K, Kübler W, Bärtsch P. Belastungsinduzierter Anstieg des pulmonalarteriellen Drucks (PAP) führt bei gesunden Familienmitgliedern von Patienten mit primär pulmonaler Hypertonie (PPH) zu Ventilations-/Perfusionsstörungen. *Dtsch Z Sportmed* 2001;52:S15.
146. Dehnert C, Weymann J, Montgomery HE, Woods D, Maggiorini M, Gibbs JSR, Bärtsch P. No association between high altitude pulmonary edema (HAPE) and angiotensin-converting enzyme (ACE) gene polymorphism (abstract). *High Alt Med Biol* 2001;2:100.
147. Friedmann B, Borisch S, Kucera K, Müller H, Erb G, Richter G, Bärtsch P. Auswirkungen eines Kraftausdauertrainings in normobarer Hypoxie auf Muskelquerschnitt, Kraftausdauer und Maximalkraft. *Dtsch Z Sportmed* 2001;52:S36.
148. Friedmann B, Borisch S, Kucera K, Müller H, Erb G, Richter G, Bärtsch P. Strength endurance training in normobaric hypoxia is not superior to equivalent training in normoxia (Abstract). *Med Sci Sports Exerc* 2001;33:S99.
149. Gibbs JSR, O'Brien A, Parker K, Maggiorini M, Swenson E, Mairbäurl H, Dahdal G, Bärtsch P. Differences in pulmonary hemodynamics between acute hypoxic and chronic pulmonary hypertension (abstract). *High Alt Med Biol* 2001;2:99.
150. Kreutzberger R, Streit M, Borisch S, Friedmann B, Bärtsch P. Thermoregulation

bei Anhidrose mit Aplasie der ekkrinen Schweißdrüsen - eine Fallvorstellung aus der sportmedizinischen Ambulanz. Dtsch Z Sportmed 2001;52:S82.

151. Maggiorini M, Swenson E, Mairbäurl H, Joller-Jemelka H, Gibbs S, Bärtsch P. Elevated interleukin-6 level in plasma suggests stress failure of the pulmonary capillaries in high altitude pulmonary edema (abstract). High Alt Med Biol 2001;2:83.
152. Mairbäurl H, Höschele S, Schwöbel F, Swenson E, Maggiorini M, Gibbs S, Bärtsch P. Altered expression of sodium transporters in HAPE-susceptibles in high altitude hypoxia (abstract). High Alt Med Biol 2001;2:88.
153. Mairbäurl H, Höschele S, Schwöbel F, Weymann J, Swenson E, Maggiorini M, Gibbs S, Bärtsch P. Expression und Aktivität von Ionentransport-Proteinen bei Höhen-Lungenödem-anfälligen Bergsteigern. Dtsch Z Sportmed 2001;52:S40.
154. Mairbäurl H, Kim KJ, Borok Z, Crandall ED. Hypoxia inhibits transepithelial Na transport across primary alveolar epithelial cell monolayers. Am J Resp Crit Care Med 2001;163:A571.
155. Mairbäurl H, Weymann J, Möhrlein A, Swenson E, Maggiorini E, Gibbs S, Bärtsch P. Decreased NA- but increased CL-transport across the nasal epithelium in high altitude hypoxia (abstract). High Alt Med Biol 2001;2:98.
156. Mairbäurl H, Zessin E, Bärtsch P. Terbutaline does not prevent formation of hypoxic pulmonary edema (abstract). High Alt Med Biol 2001;2:98.
157. Menold E, Jost J, Riffel G, Hofmann D, Friedmann B, Bärtsch P. Vergleich eines Stufentest auf dem Kanuergometer der Fa. Paddlelite mit dem Feldtest im Kanurennspor. Dtsch Z Sportmed 2001;52:S75.
158. Schneider M, Bernasch D, Weymann J, Holle R, Bärtsch P. Anfälligkeit, Aufsteigsgeschwindigkeit und Vorakklimatisierung sind die wichtigsten Determinanten der Prävalenz der Akuten Bergkrankheit (ABK). Dtsch Z Sportmed 2001;52:S36.
159. Schneider M, Bernasch D, Weymann J, Holle R, Bärtsch P. Susceptibility, rate of ascent and pre-acclimatization are major determinants for prevalence of acute mountain sickness (AMS) (abstract). High Alt Med Biol 2001;2:83.
160. Siedler K, Kreutzberger R, Menold E, Weiss C, Bärtsch P. Die belastungsinduzierte thrombin- und Fibrinbildung wird durch akute, normobare Hypoxie ($\text{FIO}_2 = 0,12$) nicht verstärkt. Dtsch Z Sportmed 2001;52:S19.
161. Swenson ER, Mongovin S, Maggiorini M, Gibbs JSR, Mairbäurl H, Bärtsch P. Alveolar macrophage interleukin-6 (IL-6) response to hypoxia and lipopolysaccharide (LPS) in high altitude pulmonary edema (HAPE-)susceptible (S) and –resistant (R) mountaineers. Am J Resp Crit Care Med 2001;163:A618. (Abstract)

162. Weiss C, Egermann M, Bärtsch P. Gesteigerte Gerinnungsaktivierung unter Belastung bei einem Sportler mit Anticardiolopin-Antikörpern. Dtsch Z Sportmed 2001;52:S65.
163. Zapf J, Petry E, Linkenbach C, Heinicke K, Rhode D, Gaisser H, Fröhlich H, Friedmann B, Schmidt W. Ein ausreichender Na⁺-Gehalt von Sportgetränken verhindert Abfälle des Plasmavolumens (PV) und der Plasma-[Na⁺] bei Langzeitbelastungen. Dtsch Z Sportmed 52:S41, 2001.
164. Arnold K, Dehnert C, Mereles D, Miltenberger-Miltenyi G, Rindermann M, Abushi A, Benz A, Kübler W, Bärtsch J, Janssen B, Grünig E. Abnormale hypoxische Vasokonstriktion bei Genträgern der PPH. Z Kardiol 2002;91:210.
165. Bailey DM, Bärtsch P. Direct evidence for lightning-induced free radical generation and skeletal muscle damage. High Alt Med Biol 2002;3(4):455.
166. Bailey DM, Kleger G-R, Ballmer P, Bärtsch P. Free radical-mediated vascular damage is not a cause or consequence of acute mountain sickness. High Alt Med Biol 2002;3(4):454.
167. Bärtsch P, Weiss C. Exercise-induced activation of blood coagulation and fibrinolysis. Int J Sports Med 2002;23(Suppl. S2):S120.
168. Borisch S, Bärtsch P, Friedmann B. Effects of strength endurance training in hypoxia on endurance capacity, blood volume on erythropoietin. Int J Sports Med 2002;23(Suppl. S2):S80.
169. Dehnert C, Grünig E, Mereles D, Arnold K, Kübler W, Bärtsch P. Exercise-induced increase of pulmonary artery pressure (PAP) is associated with ventilation/perfusion mismatch in healthy family members of primary pulmonary hypertension (PPH) index patients. Int J Sports Med 2002;23(Suppl. S2):S85.
170. Dehnert C, Lennep N, Grünig E, Mereles D, Abushi A, Kübler W, Bärtsch P. Identification of subjects susceptible to high altitude pulmonary edema (HAPE) by Doppler-echocardiography during exercise in normoxia and hypoxia. Med Sci Sports Exerc 2002;35(Suppl.5):S247.
171. Dehnert C, Miltenberger-Miltenyi G, Grünig E, Bärtsch P, Janssen B. Normal BMPR-2 Gene in individuals susceptible to high altitude pulmonary edema (HAPE-S). High Alt Med Biol 2002;3(1):100.
172. Friedmann B, Borisch S, Kucera K, Müller H, Erb G, Richter G, Bärtsch P. Effects of strength endurance training in normobaric hypoxia on muscle cross sectional area, strength endurance capacity and maximal strength. Int J Sports Med 2002;23(Suppl. S2):S78.
173. Heerlein K, Schulze A, Bärtsch P, Mairbäurl H. Hypoxia reduces cellular oxygen consumption and Na/K-ATPase activity of alveolar epithelial cells. High Alt Med Biol 2002;3(4):449.

174. Höschele S, Bärtsch P, Mairbäurl H. Hypoxia affects the expression of Na/K pumps and EnaC of A549 cells. *Pflügers Arch Eur J Physiol* 2002;443:S282-P22-7.
175. Höschele S, Bärtsch P, Mairbäurl H. Effects of hypoxia and dexamethasone on Na-transport of alveolar epithelial cells. *High Alt Med Biol* 2002;3(4):449.
176. Höschele S, Bärtsch P, Mairbäurl H. Prolonged exposure to hypoxia increases expression of Na transporters of cultured alveolar epithelial cells. *High Alt Med Biol* 2002;3(4):433.
177. Karle C, Gehrig T, Wodopia R, Höschele S, Kreye VA, Bärtsch P, Mairbäurl H. Hypoxia-induced inhibition of K-channels of alveolar epithelial cells (A549 cells). *Pflügers Arch Eur J Physiol* 2002;443:S188-O17-6.
178. Kreutzberger R, Streit M, Borisch S, Friedmann B, Bärtsch P. Case Report: Thermoregulation in a patient with anhydrosis due to aplasia of sweat glands. *Int J Sports Med* 2002;23(Suppl. S2):S127.
179. Mairbäurl H, Höschele S, Schwöbel F, Weymann J, Swenson E, Maggiorini M, Gibbs S, Bärtsch P. Expression and activity of ion transport proteins of mountaineers susceptible to high altitude pulmonary edema in hypoxia. *Int J Sports Med* 2002;23(Suppl. S2):S117.
180. Mairbäurl H, Höschele S, Schwöbel F, Weymann J, Swenson E, Maggiorini M, Gibbs S, Bärtsch P. Expression and activity of ion transporters of mountaineers susceptible to high altitude pulmonary edema. *FASEB J* 2002;16:A65-112.8.
181. Mairbäurl H, Mayer K, Kim KJ, Borok Z, Bärtsch P, Crandall ED. Hypoxia decreases active Na transport across primary rat alveolar epithelial cell monolayers. *Pflügers Arch Eur J Physiol* 2002;443:S284-P23-2.
182. Menold E, Jost J, Riffel G, Hofmann D, Friedmann B, Bärtsch P. Comparison of an incremental test on the "Paddlelite" canoe ergometer with a field test in canoeing racing. *Int J Sports Med* 2002;23(Suppl. S2):S75.
183. Schneider M, Bernasch D, Weymann J, Holle R, Bärtsch P. Susceptibility, rate of ascent and pre-acclimatization are major determinants for prevalence of acute mountain sickness (AMS). *Int J Sports Med* 2002;23(Suppl. S2):S78.
184. Siedler K, Kreutzberger R, Menold E, Weiss C, Bärtsch P. Acute normobaric hypoxia ($\text{FIO}_2=0.12$) does not enhance exercise-induced thrombin and fibrin formation. *Int J Sports Med* 2002;23(Suppl. S2):S120.
185. Weiss C, Egermann M, Bärtsch P. Enhanced exercise-induced activation of coagulation in a young athlete with anticardiolipin antibodies (case report). *Int J Sports Med* 2002;23(Suppl. S2):S122.
186. Zapf J, Schmidt W, Heinicke K, Petry E, Linkenbach C, Rhode D, Gaisser H, Fröhlich H, Friedmann B. Sufficient Na^+ -content of sports drinks prevents decreases

- in plasma volume and plasma-[Na⁺] during long-term endurance exercise (Abstract). Int J Sports Med 2002;23:S128.
187. Bärtsch P. Endotheliale Dysfunktion (Abstract). Med Klin 2003;98: Abstract-Band I:V556.
188. Bailey DM, Knauth M, Kallenberg K, Christ S, Mohr A, Roukens R, Genius J, Storch-Hagenlocher B, Meisel F, Steiner T, et al. Molecular and morphological changes to the hypoxic human brain; focus on acute mountain sickness (Abstract). Journal of Physiology 2003;554.P:C119.
189. Bauer T, Friedmann B, Weller E, Bärtsch P. Beziehung zwischen ventilatorischer Schwelle und individueller anaerober und 4 mmol Laktatschwelle. Dtsch Z Sportmed 2003;54:S65.
190. Dehnert C, Ho AD, Bärtsch P. Benefits from regular endurance training in patients undergoing aloogenous blood stem cell transplantation. Med Sci Sports Exerc 2003;35(5):S236.
191. Dehnert D, Lennep N, Grünig E, Mereles D, Abushi A, Katus H, Bärtsch P. Identifikation höhenlungeödemfälliger Individuen kann durch pulmonalarterielle Druckmessung unter Belastung in Hypoxie nicht verbessert werden. Dtsch Z Sportmed 2003;54(7+8):S34.
192. Frese F, Menold E, Jost J, Jedamsky A, Bärtsch P, Friedmann B. Interindividuelle Variabilität im Erythopoetinanstieg und in der Zunahme des Gesamtkörperhämoglobins bei Höhentraining. Dtsch Z Sportmed 2003;54:S78.
193. Friedmann B, Kinscherf R, Borisch S, Müller H, Bärtsch P, Billeter R. Auswirkungen eines desmodromischen Kraftausdauertrainings auf Muskelfasertypverteilung und Genexpression. Dtsch Z Sportmed 2003;54:S26.
194. Friedmann B, Kinscherf R, Borisch S, Bärtsch P. Effects of strength endurance training in severe normobaric hypoxia on muscle structure and gene expression. Med Sci Sports Exerc 2003;35:S162.
195. Bailey DM, Kallenberg K, Bärtsch P, Christ S, Mohr A, Roukens R, Genius J, Storch-Hagenlocher B, Meisel F, Steiner T, Knauth M. Electron paramagnetic resonance (EPR) spectroscopy; a novel molecular tool to assess barrier function in the human brain? In: Proceedings of Peripheral Markers of Blood-Brain Barrier Failure (Cleveland, Ohio, November 3rd, 2004).
196. Bailey D, Roukens R, Genius J, Meisel F, McEneny J, Young IS, Steiner T, Bärtsch P. Inspiratory hypoxia increases metal-catalyzed free radical generation in human CSF. High Alt Med Biol 2004;5(4):474-475.
197. Berger MM, Hesse C, Dehnert C, Siedler H, Kleinbogard P, Gharini P, Bardenheuer HJ, Kelm, Bärtsch P, Haefeli WE. Hypoxia impairs endothelial function in individuals susceptible to high-altitude pulmonary oedema (HAPE): The missing

- link in the pathogenesis of HAPE? High Alt Med Biol 2004;5(4):476.
198. Bernheim A, Kiencke S, Maggiorini M, Fischler M, Mairbäurl H, Brunner-La Rocca HP. Myocardial capillary leakage as potential mechanisms of left ventricular diastolic dysfunction at high altitude. High Alt Med Biol 2004;5(4):477.
199. Christ AL, Clarenbach CF, Senn O, Fischler M, Mairbäurl H, Maggiorini M, Bloch K. Pulmonary function and nocturnal ventilation in mountaineers developing HAPE. High Alt Med Biol 2004;5(4):478.
200. Clarenbach CF, Christ AL, Senn O, Fischler M, Mairbäurl H, Maggiorini M, Bloch K. Dexamethasone and tadalafil prevent HAPE and subclinical alterations in lung function and nocturnal oxygenation associated with pulmonary interstitial fluid accumulation. High Alt Med Biol 2004;5(4):478-479.
201. Dehnert C, Fink C, Ley S, Risse F, Kauczor HU, Bärtsch P. Inhomogeneous pulmonary perfusion in subjects susceptible to high altitude pulmonary edema. High Alt Med Biol 2004;5(4):480-481.
202. Dorschner L, Debrunner J, Fischler M, Clarenbach CF, Christ AL, Bloch K, Mairbäurl H, Maggiorini M. Dexamethasone inhibits sympathetic activity in HAPE-susceptible mountaineers at 4559 m. High Alt Med Biol 2004(4); 5:482.
203. Fischler M, Dorschner L, Debrunner J, Brunner-La Rocca HP, Kiencke S, Bernheim A, Bloch K, Mairbäurl H, Maggiorini M. Maximal exercise capacity at high altitude is not influenced by prophylaxis with dexamethasone or tadalafil in HAPE-susceptible subjects. High Alt Med Biol 2004;5(4):484.
204. Fischler M, Dorschner L, Debrunner J, Brunner-La Rocca HP, Kiencke S, Bernheim A, Mairbäurl H, Maggiorini M.: Effects of the phosphodiesterase-5 inhibitor tadalafil and dexamethasone on pulmonary arterial pressure during exercise at 4559 m in HAPE-susceptibles. High Alt Med Biol 2004;5(4):484.
205. Heerlein K, Schulze A, Hotz L, Bärtsch P, Mairbäurl H. Hypoxia decreases cellular and mitochondrial oxygen consumption of A549 alveolar epithelial cells. Pflügers Arch Eur J Physiol 2004;447 (Suppl. 1): S134-P27-6.
206. Hotz L, Heerlein K, Bärtsch P, Mairbäurl H. Oxygen dependent mitochondrial function and formation of reactive oxygen species. Pflügers Arch Eur J Physiol 2004;447 (Suppl. 1): S133-P27-5.
207. Kallenberg K, Christ S, Mohr A, Menold E, Roukens R, Bailey DM, Bärtsch P, Knauth M. Cerebral MRI of subjects with hypoxia induced symptoms of acute mountain sickness – an approach to pathophysiology? ASNR 42nd Annual Meeting Seattle, June 5-11, 2004.
208. Lehmann TJ, Pleisch B, Maggiorini M, Fischler M, Mairbäurl H, Bärtsch P, Reinhart WH. Einfluss einer Höhenexposition (4559 m) auf die Thrombozytenfunktion. Schweiz Med Forum 2004;4 (Suppl 17):92S.

209. Maggiorini M, Brunner-La Rocca HP, Bärtsch P, Fischler M, Böhm T, Bloch KE, Mairbäurl H. Dexamethasone and tadalafil prophylaxis prevents both excessive pulmonary constriction and high altitude pulmonary edema in susceptible subjects (abstract). Eur Respir J 2004;24(Suppl. 48):110s.
210. Maggiorini M, Brunner-La Rocca HP, Fischler M, Böhm T, Lehmann T, Bloch KE, Naeije R, Bärtsch P, Mairbäurl H. Phosphodiesterase-5 inhibition and glucocorticoids prevent excessive hypoxic pulmonary vasoconstriction and high altitude pulmonary edema in susceptible subjects. High Alt Med Biol 2004;5(4):494.
211. Mairbäurl H, Bärtsch P, Peth S, Fischler M, Dehnert C, Brunner H-P, Maggiorini M. Dexamethasone prevents high altitude pulmonary edema without effects on nasal potentials. Eur Respir J 2004;24(Suppl. 48):327s.
212. Mairbäurl H, Peth S, Dehnert C, Fischler M, Maggiorini M, Bärtsch P. Prevention of HAPE is not associated with changes in nasal potentials. High Alt Med Biol 2004;5(4):494.
213. Peth S, Karle C, Dehnert C, Bärtsch P, Mairbäurl H. The K-ATP-channel opener minoxidil prevents hypoxic decrease in nasal potentials but not pulmonary hypertension. High Alt Med Biol 2004;5(4):498-499.
214. Ruppe F, Bärtsch P, Mairbäurl H. ATP-release from red cells is increased under simulated exercise conditions. High Alt Med Biol 2004;5(4):499.
215. van Osta A, Moraine JJ, Mélot C, Mairbäurl H, Maggiorini M, Naeije R. Effects of high altitude exposure on cerebral hemodynamics in normal subjects. High Alt Med Biol 2004;5:497-498.
216. Bärtsch P. Höhentraining. Dtsch Z Sportmed 2005;56:234.
217. Bauer T, Klute K, Kinscherf R, Vorwald S, Billeter R, Müller H, Bärtsch P, Friedmann B. Auswirkungen eines desmodromischen Maximalkrafttrainings auf den Glykogengehalt der Muskelfasern und die Laktatmobilisation. Dtsch Z Sportmed 2005;56:281.
218. Berger MM, Hesse C, Dehnert C, Siedler H, Kleinbongard P, Gharini P, Kelm M, Bardenheuer HJ, Bärtsch P, Haefeli WE. Hypoxie führt zu systemischer endothelialer Dysfunktion bei Personen mit gesteigerter hypoxisch pulmonaler Vasokonstriktion. Anast Intensivmed 2005;46:565-566.
219. Berger MM, Haselmayr M, Hesse C, Haefeli WE, Bärtsch P. Die Hypoxie-induzierte pulmonalarterielle Hypertonie ist nicht mit systemisch erhöhten Plasma-Katecholaminspiegeln assoziiert. Dtsch Z Sportmed 2005;56:262.
220. Berger MM, Schieber C, Dehler M, Bardenheuer HJ, Bärtsch P, Mairbäurl H. Endothelin-1 impairs alveolar liquid clearance and accelerates edema formation in normoxia and hypoxia. Eur J Anaesth 2005;22(Suppl. 34):65.

221. Dehnert C, Fink C, Ley S, Risse F, Bärtsch P, Kauczor HU. Inhomogene Lungenperfusion in Hypoxie bei Höhenlungenödem-anfälligen Bergsteigern. Dtsch Z Sportmed 2005;56:261.
222. Eckhardt H, Friedmann B, Dickhuth HH, Röcker K, Heck H, Bärtsch P. Vergleich zwischen individuellen anaeroben Laktatschwellen und ventilatorischer Schwelle. Dtsch Z Sportmed 2005;56:240.
223. Frese F, Jost J, Spikermann M, Bärtsch P, Friedmann B. Evaluation eines 5 x 200 m-Schwimmstufentests im Vergleich zu dem im Deutschen Schwimm-Verband etablierten Pansoldtest. Dtsch Z Sportmed 2005;56:242.
224. Friedmann B. Neue Entwicklungen im Krafttraining. Dtsch Z Sportmed 2005;56:222.
225. Friedmann B, Frese F, Menold E, Bärtsch P. Anaerobe Kapazität von Ausdauer trainierten Läufern bei akuter Hypoxieexposition. Dtsch Z Sportmed 2005;56:276.
226. Friedmann B, Frese F, Menold E, Bärtsch P. Effects of acute moderate hypoxia on anaerobic capacity in endurance-trained runners. Med Sci Sports Exerc 2005;37:S294.
227. Grünig E, Dehnert C, Mereles D, Koehler R, Olszewski H, Bärtsch P, Janssen B. Enhanced hypoxic pulmonary vasoconstriction in families of adults or children with idiopathic pulmonary arterial hypertension. Chest 2005;128(6 Suppl):630S-633S.
228. Guney S, Bärtsch P, and Mairbäurl H. Dexamethasone stimulates alveolar fluid reabsorption in normoxia and hypoxia. FASEB J 2005;19(4):A173.
229. Loeh B, Bärtsch P, and Mairbäurl H. Pretreatment with beta-agonists stimulates alveolar Na-transport in normoxia and hypoxia. FASEB J 2005;19(4):A173.
230. Mairbäurl H. Genexpression und körperliche Belastung. Dtsch Z Sportmed 2005;56:230.
231. Mairbäurl H, Brunner HP, Peth S, Dehnert C, Fischler M, Böhm T, Bärtsch P, and Maggiorini M. Phosphodiesterase-5 Hemmer und Glukocorticoide verhindern ein Höhenlungenödem. Dtsch Z Sportmed 2005;56:218.
232. Mairbäurl H, Hotz L, Chaudhuri N, Heerlein K, and Bärtsch P. Oxygen- and flux dependency of ROS formation of lung alveolar epithelial cells. Shock 2005;23(50):142.
233. Menold E, Friedmann B, Dehnert C, Bärtsch P. Evaluation von sieben Spiroergometriegeräten verschiedener Hersteller mit der Kalibrationspumpe der Fa. Vacumed. Dtsch Z Sportmed 2005;56:244.
234. Ott A, Bärtsch P, and Mairbäurl H. Dexamethasone stimulates expression of Na-

- transporters of A549-cells in hypoxia. FASEB J 2005;19(4):A173.
235. Schmitt L, Dehnert C, Bärtsch P, and Mairbäurl H. Steigerung der Atemwegssekrektion während Belastung. Dtsch Z Sportmed 2005;56:218.
236. Tadibi V, Menold E, Bärtsch P, Dehnert C. Kurzzeitige intermittierende Hypoxie steigert weder aerobe noch anaerobe Leistungsfähigkeit. Dtsch Z Sportmed 2005;56:276.
237. Tadibi V, Menold E, Dehnert C, Bärtsch P. No improvement of aerobic and anaerobic performance after repeated exposure to short-term intermittent hypoxia. ECSS Congress Belgrade July 2005.
238. Bailey DM, Ainslie PN, Evans KA, Hullin DA, Bärtsch P. Prior disruption of blood-brain barrier integrity compounds hypoxic headache; exercise, heat and free radicals as "vasogenic primers". Proceedings of the Physiological Society 2006; 1 PC26.
239. Bailey DM, Kallenberg K, Christ S, Mohr A, Roukens R, Menold E, Steiner T, Bärtsch P, Knauth M. The "tight-fit" brain; an anatomical risk factor for hypoxic headache? Proceedings of the Physiological Society 2006; 3 C37.
240. Bärtsch P. Effects of high altitude on patients with cardiovascular disease. Isokinetics and Exercise Sciences 2006;14:111-2.
241. Bauer R, Dehnert C, Schoene P, Filusch A, Bärtsch P, Borst M, Katus H, Meyer F. Dysfunktion der Skelettmuskulatur und Atemmuskulatur bei Patienten mit idiopathischer pulmonaler Hypertonie (IPAH). Pneumologie 2006;60:S1-S96.
242. Berger MM, Schieber C, Dehler M, Rozendahl S, Bardenheuer HJ, Bärtsch P, Mairbäurl H. Endothelin-1 reduziert die alveolare Flüssigkeitsrückresorption und beschleunigt die Bildung von Lungenödem unter Normoxie und Hypoxie bei der Ratte. Anästh Intensivmed 2006;47:416-7.
243. Klute K, Bauer T, Kinscherf R, Vorwald S, Bischoff D, Müller H, Weber MA, Kauczor HU, Bärtsch P, Billeter R, Friedmann B. Effects of computer-guided strength training with eccentric overload in trained athletes. ECSS Lausanne 2006;Book of Abstracts:532-3.
244. Loeh B, Bärtsch P, Mairbäurl H. Downregulation of beta receptor signalling in alveolar epithelial cells in hypoxia. Acta Physiologica 2006;186(68):OM06-32.
245. Loeh B, Bärtsch P, Mairbäurl H. Downregulation of the beta 2-receptor signalling cascade in alveolar epithelial cells in hypoxia. Proc Am Thorac Soc 2006;3:A856.
246. Loeh B, Bärtsch P, Mairbäurl H. Pretreatment with terbutaline stimulates alveolar Na-transport in normoxia and hypoxia. Proc Am Thorac Soc 2006;3:A866.
247. Mairbäurl H, Guney S, Bärtsch P. Dexamethasone stimulates alveolar reabsorption

- in normoxia and hypoxia. *Acta Physiologica* 2006;168(146):PM08P-2.
248. Mairbäurl H, Hotz L, Chaudhuri N, Bärtsch P. O₂-dependent ROS-formation in alveolar epithelial cells. *Acta Physiologica* 2006;168(146):PM08P-2.
249. Rozendahl CS, Berger MM, Zügel S, Bärtsch P, Mairbäurl H. Endothelin reduces rat lung alveolar fluid reabsorption. *Acta Physiologica* 2006;186 (Suppl. 1)(106):OW04-21.
250. Schendler G, Luks A, Menold E, Berger MM, Bärtsch P, Swenson ER, Dehnert C. Body plethysmography at high altitude (4559 m): No evidence for interstitial pulmonary edema in mountaineers with and without acute mountain sickness. 11th Annual Congress of the European College of Sports Science 2006 Jul 5-2006 Jul 8;Book of Abstracts:261-2.
251. Schmitt L, Dehnert C, Bärtsch P, Mairbäurl H. Airway secretion is impaired in exercise induced asthma and cystic fibrosis during exercise. *Proc Am Thorac Soc* 2006;3:A452.
252. Bailey DM, Dehnert C, Bärtsch P, Mairbäurl H, Luks A, Gutowski M, Menold E, Faoro V, Castell C, Schendler G, Swenson E, Berger MM. Direct evidence for increased pulmonary free radical generation in AMS and HAPE. Book of Abstracts of the 15th International Hypoxia Symposium, 27.02.-04.03.2007, Lake Louise, Canada; p. 59.
253. Berger MM, Bärtsch P, Luks A, Bailey DM, Castell C, Schendler G, Menold E, Faoro V, Mairbäurl H, Swenson ER, Dehnert C. Indirect markers of pulmonary endothelial function correlate with pulmonary artery pressure at high altitude. Book of Abstracts of the 15th International Hypoxia Symposium, 27.02.-04.03.2007, Lake Louise, Canada; p. 77.
254. Berger MM, Bärtsch P, Mairbäurl H, Swenson E, Dehnert C. Indirect markers of pulmonary endothelial dysfunction correlate with high-altitude induced pulmonary hypertension. *Eur J Anaesth* 2007;24(suppl. 39):1.
255. Dehnert C, Luks A, Schendler G, Menold E, Berger MM, Castell C, Faoro V, Mairbäurl H, Bailey DM, Swenson ER, Bärtsch P. No change of lung volumes and compliance measured by body plethysmography in AMS at 4559 m. Book of Abstracts of the 15th International Hypoxia Symposium, 27.02.-04.03.2007, Lake Louise, Canada; p. 61.
256. Dehnert Ch, Luks A, Schendler G, Menold E, Berger MM, Castell C, Mairbäurl H, Swenson ER, Bärtsch P. Bodyplethysmographische Messungen der Lungenvolumina und Messung der Lungengcompliance in 4559 m Höhe ergeben keinen Anhalt für ein subklinisches Lungenödem. *Dtsch Z Sportmed* 2007;58:264.
257. Dehnert C, Luks A, Schendler G, Menold E, Berger MM, Mairbäurl H, Bailey DM, Swenson ER, Bärtsch P. No correlation between pulmonary artery pressure and

markers of pulmonary interstitial fluid accumulation at altitude. Med Sci Sports Exerc 2007;39:S94.

258. Dehnert Ch, Menold E, Böhm A, Grigoriev I, Bärtsch P. Schlafen in simulierter Höhe (normobare Hypoxie) reduziert die Symptome der akuten Bergkrankheit. Dtsch Z Sportmed 2007;58:264.
259. Eckhardt H, Wollny R, Müller H, Bärtsch P, Friedmann B. Erhöhte myoelektrische Aktivität und gesteigerte Laktatbildung bei seitenalternierendem Vibrationstraining. Dtsch Z Sportmed 2007;58:218.
260. Eckhardt H, Wollny R, Bärtsch P, Friedmann B. Enhanced myoelectric activity of the vastus lateralis muscle and blood lactate concentration during vibration training. 12th Annual Congress of the ECSS 1911 Jul 14-2007 Jul 14:574-5.
261. Frese F, Eisenkolb E, Bärtsch P, Friedmann B. Schwankungen im Gesamtkörperhämoglobin einer 400m-Läuferin aufgrund von Krankheit, Verletzung und Eisenmangel. Dtsch Z Sportmed 2007;58:283.
262. Friedmann B, Vorwald S, Billeter R, Klute K, Bauer T, Müller H, Bärtsch P, Metz J, Kinscherf R. Neubildung von Muskelfasern aus aktivierten Satellitenzellen im Musculus vastus lateralis nach Maximalkrafttraining. Dtsch Z Sportmed 2007;58:206.
263. Friedmann B, Vorwald S, Billeter R, Klute K, Bauer T, Müller H, Bärtsch P, Kinscherf R. Increased expression of neonatal MHC in skeletal muscle after heavy resistance exercise. Med Sci Sports Exerc 2007;39:S7.
264. Hildebrandt W, Sauer R, Kinscherf R, Bodens A, Dugi K, Bärtsch P, Dröge W. Reduced hypoxic ventilatory response in middle-aged smokers during abstinence from cigarettes. 12th Annual Congress of the ECSS 1911 Jul 14-2007 Jul 14:544.
265. Holt T, Fraser B, Hill A, Swenson E, Bärtsch P, Gassmann M, Tissot van Patot M. Evidence that elevated hematocrit and atrial natriuretic peptide are early markers for cattle at risk for high mountain disease. High Alt Med Biol 2007;7:330-1.
266. Kuni B, Bangert Y, Cardenas-Montemayor E, Mehnert U, Friedmann B, Schmitt H. Beeinträchtigung der Gleichgewichtskontrolle durch eine Laufbandbelastung an der anaeroben Schwelle – eine kontrollierte Studie mit Handballerinnen der ersten Bundesliga. Dtsch Z Sportmed 2007;58:279.
267. Mairbäurl H, Berger MM, Bärtsch P, Dehnert C, Schendler G, Menold E, Luks A, Bailey D, Faoro V, Castell C, Swenson E. Endothelin receptors upregulated in circulating endothelial cells in HAPE? Book of Abstracts of the 15th International Hypoxia Symposium, 27.02.-04.03.2007, Lake Louise, Canada; p. 74.
268. Mairbäurl H, Faoro V, Bailey D, Berger MM, Bärtsch P, Dehnert C, Schendler G, Menold E, Luks A, Castell C, Swenson E. Increased metabolic activity of leukocytes

in AMS-susceptibles. Book of Abstracts of the 15th International Hypoxia Symposium, 27.02.-04.03.2007, Lake Louise, Canada; p. 76.

269. Mehnert U, Menold E, Dehnert C, Friedmann B, Bärtsch P. Ist ein Gewöhnungstest auf dem Fahrradergometer in Studien mit übergewichtigen Kindern notwendig? Dtsch Z Sportmed 2007;58:214.
270. Ulrich G, Chounard D, Bärtsch P, Friedmann B. Jet-Lag Symptome bei Leichtathleten/innen der U20 Nationalmannschaft nach Anreise zur U20 WM in Peking. Dtsch Z Sportmed 2007;58:253.
271. Baloglu E, Ke A, Bärtsch P, Mairbäurl H. Hypoxia impairs beta2-adrenergic receptor signalling in rat primary alveolar cells by pertussis toxin sensitive mechanisms. PulmoNet, Saarbrücken, 9.-11.3.2008.
272. Baloglu E, Ke A, Bärtsch P, Mairbäurl H. Inhibition of G1/o-proteins prevents hypoxia-induced impairment of beta2-adrenergic signalling in rat alveolar epithelial cells. Experimental Biology, San Diego, April 2008.
273. Berger MM, Pitzer B, Martin E, Bärtsch P, Mairbäurl H, Hollmann MW. Ketamin reduziert die alveoläre Flüssigkeitsresorption der Ratte durch Inhibierung epithelialer Na⁺-Kanäle. Anaesthesiol Intensivmed Notfallmed Schmerzther 2008;Suppl. 2:PO 4.1.8.
274. Berger MM, Pitzer B, Martin E, Hollmann M, Mairbäurl H. Ketamine reduces alveolar fluid clearance of the rat by inhibition of epithelial Na⁺ channels. Eur J Anaesth 2008;25(Suppl. 44):125.
275. Böhm A, Menold E, Grigoriev I, Bärtsch P, Dehnert C. Simulated altitude during the night ameliorates symptoms of acute mountain sickness. European College of Sports Science, Estoril, Portugal, 2008; Book of Abstracts:67.
276. Dehnert C. Is intermittent hypoxia helpful in preparation for high altitude exposure? European College of Sports Science, Estoril, Portugal, 2008; Book of Abstracts:281.
277. Frese F, Eisenkolb E, Schmidt WF, Bärtsch P, Friedmann-Bette B. Effects of repetitive training at low altitude on erythropoiesis in elite 400m and 800m runners. Med Sci Sports Exerc 2008;40:S170.
278. Friedmann-Bette B. Gender differences in muscular adaptation to strength training. Kongressband des 5. EISCSA Kongresses SPORTMEDICA, Luxemburg 2008.
279. Friedmann-Bette B, Bauer T, Kinscherf R, Vorwald S, Klute K, Bischoff D, Bärtsch P, Billeter R. Shift towards faster gene expression pattern in vastus lateralis muscle after strength training with eccentric overload in athletes. APS Intersociety Meeting: the Integrative Biology of Exercise – V. Hilton Head, South Carolina 24.-27.09.2008(Book of Abstracts 19.12):50.

280. Hotz L, Chaudhuri N, Bärtsch P, Mairbäurl H. Oxygen- and ROS-dependency of expression of Na⁺-transporters in lung alveolar A549 cells. Deutsche Physiol. Ges., Köln, 2.-5.3.2008.
281. Schuler A, Güney S, Zügel S, Bärtsch P, Mairbäurl H. Dexamethasone-stimulation of Na⁺-transport differs across lung epithelia. Experimental Biology, San Diego, April 2008.
282. Zügel S, Bärtsch P, Mairbäurl H. Co-culture and endothelial cells blunts failure of barrier function in hypoxia. PulmoNet, Saarbrücken, 9.-11.3.2008.
283. Zügel S, Bärtsch P, Mairbäurl H. Co-culture with endothelium improves the barrier function of alveolar epithelial cells in hypoxia in-vitro. Deutsche Physiol. Ges. Köln, 2.-5.3.2008.
284. Zügel S, Bärtsch P, Mairbäurl H. Co-culture of alveolar epithelial and endothelial cells blunts failure of alveolar barrier function in hypoxia. Experimental Biology, San Diego, April 2008.