7. LITERATURVERZEICHNIS

1. Berne RM. Metabolic regulation of blood flow. *Circ Res*. 1964;14(Suppl 1):I261-I268.

2. Hudlická O, el Khelly F. Metabolic factors involved in regulation of muscle blood flow. *J Cardiovasc Pharmacol*. 1985;7(Suppl 3):S59-S72.

3. Björnberg J, Maspers M, Mellander S. Metabolic control of large-bore arterial resistance vessels, arterioles, and veins in cat skeletal muscle during exercise. *Acta Physiol Scand*. 1989;135(2):83-94.

4. Bayliss WM. On the local reactions of the arterial wall to changes of internal pressure. *J Physiol*. 1902;28:220-231.

5. Folkow B. Intravascular pressure as a factor regulating the tone of the small vessels. *Acta Physiol Scand*. 1949;17:289-310.

6. Sun D, Messina EJ, Kaley G, Koller A. Characteristics and origin of myogenic response in isolated mesenteric arterioles. *Am J Physiol*. 1992;263:H1486-H1491.

7. Koller A, Sun D, Huang A, Kaley G. Corelease of nitric oxide and prostaglandins mediates flow-dependent dilation of rat gracilis muscle arterioles. *Am J Physiol*. 1994; 267:H326-H332.

8. Kuo L, Chilian WM, Davis MJ. Interaction of pressure- and flow-induced responses in porcine coronary resistance vessels. *Am J Physiol*. 1991;261:H1706-H1715.

9. Furchgott RF, Zawadzki JV. The obligatory role of endothelial cells in the relaxation of arterial smooth muscle by acetylcholine. *Nature*. 1980;288(5789):373-376.

10. Vanhoutte PM, Mombouli JV. Vascular endothelium: vasoactive mediators. *Prog Cardiovasc Dis*. 1996;39(3):229-238.

11. Palmer RM, Ferrige AG, Moncada S. Nitric oxide release accounts for the biological activity of endothelium-derived relaxing factor. *Nature*. 1987;327(6122):524-526.

12. Ignarro LJ, Buga GM, Wood KS, Byrns RE, Chaudhuri G. Endothelium-derived relaxing factor produced and released from artery and vein is nitric oxide. *Proc Natl Acad Sci USA*. 1987;84(24):9265-9269.

13. Ignarro LJ. Biological actions and properties of endothelium-derived nitric oxide formed and released from artery and vein. *Circ Res*. 1989;65(1):1-21.

14. Moncada S, Herman AG, Higgs EA, Vane JR. Differential formation of prostacyclin (PGX or PGI_2) by layers of the arterial wall. An explanation for the anti-thrombotic properties of vascular endothelium. *Thromb Res*. 1977;11(3):323-344.

15. Smyth EM, Austin SC, Reilly MP, FitzGerald GA. Internalization and sequestration of the human prostacyclin receptor. *J Biol Chem*. 2000;275(41):32037-32045.

16. Kaley G, Koller A, Rodenburg JM, Messina EJ, Wolin MS. Regulation of arteriolar tone and responses via L-arginine pathway in skeletal muscle. Am.J.Physiol. 1992;262:H987-H992.

17. de Wit C, von Bismarck P, Pohl U. Mediator role of prostaglandins in acetylcholine-induced vasodilation and control of resting vascular diameter in the hamster cremaster microcirculation in vivo. *J Vasc Res*. 1993;30(5):272-278.

18. Friebel M, Klotz KF, Ley K, Gaehtgens P, Pries AR. Flow-dependent regulation of arteriolar diameter in rat skeletal muscle in situ: role of endothelium-derived relaxing factor and prostanoids. *J Physiol*. 1995;483:715-726.

19. Chen G, Yamamoto Y, Miwa K, Suzuki H. Hyperpolarization of arterial smooth muscle induced by endothelial humoral substances. *Am J Physiol*. 1991;260:H1888-H1892.

20. Lischke V, Busse R, Hecker M. Selective inhibition by barbiturates of the synthesis of endothelium-derived hyperpolarizing factor in the rabbit carotid artery. *Br J Pharmacol*. 1995;115(6):969-974.

21. Mombouli JV, Bissiriou I, Agboton VD, Vanhoutte PM. Bioassay of endothelium-derived hyperpolarizing factor. *Biochem Biophys Res Commun*. 1996;221(2):484-488.

22. Bény JL. Endothelial and smooth muscle cells hyperpolarized by bradykinin are not dye coupled. *Am J Physiol*. 1990;258:H836-H841.

23. Suzuki H, Chen G, Yamamoto Y. Endothelium-derived hyperpolarizing factor (EDHF). *Jpn Circ J*. 1992;56(2):170-174.

24. Bény JL, Pacicca C. Bidirectional electrical communication between smooth muscle and endothelial cells in the pig coronary artery. *Am J Physiol*. 1994;266:H1465-H1472.

25. Hecker M, Bara AT, Bauersachs J, Busse R. Characterization of endothelium-derived hyperpolarizing factor as a cytochrome P450-derived arachidonic acid metabolite in mammals. *J Physiol*. 1994;481:407-414.

26. Campbell WB, Gebremedhin D, Pratt PF, Harder DR. Identification of epoxyeicosatrienoic acids as endothelium-derived hyperpolarizing factors. *Circ Res*. 1996;78(3):415-423.

27. Fisslthaler B, Popp R, Kiss L, Potente M, Harder DR, Fleming I, Busse R. Cytochrome P450 2C is an EDHF synthase in coronary arteries. *Nature*. 1999;401(6752):493-497.

28. Popp R, Bauersachs J, Hecker M, Fleming I, Busse R. A transferable, beta-naphthoflavone-inducible, hyperpolarizing factor is synthesized by native and cultured porcine coronary endothelial cells. *J Physiol*. 1996;497:699-709.

29. Adeagbo AS. Endothelium-derived hyperpolarizing factor: characterization as a cytochrome P450 1A-linked metabolite of arachidonic acid in perfused rat mesenteric prearteriolar bed. *Am J Hypertens*. 1997;10(7):763-771.

30. Nelson MT. Ca^{2+}-activated potassium channels and ATP-sensitive potassium channels as modulators of vascular tone. *Trends Cardiovasc Med*. 1993;3(2):54-60.

31. Edwards G, Dora KA, Gardener MJ, Garland CJ, Weston AH. K^+ is an endothelium-derived hyperpolarizing factor in rat arteries. *Nature*. 1998;396(6708):269-272.

32. Stingl J, Hilbelink DR, Rhodin JA. Differences in microcirculatory bed arrangement in some skeletal muscles of the rat and golden hamster. *Int J Microcirc Clin Exp*. 1996;16(1):1-7.

33. Baez S. An open cremaster muscle preparation for the study of blood vessels by in vivo microscopy. *Microvasc Res*. 1973;5(3):384-394.

34. Hill MA, Simpson BE, Meininger GA. Altered cremaster muscle hemodynamics due to disruption of the deferential feed vessels. *Microvasc Res*. 1990;39(3):349-363.

35. Messina EJ, Sun D, Koller A, Wolin MS, Kaley G. Increases in oxygen tension evoke arteriolar constriction by inhibiting endothelial prostaglandin synthesis. *Microvasc Res*. 1994;48(2):151-160.

36. Pries AR, Heide J, Ley K, Klotz KF, Gaehtgens P. Effect of oxygen tension on regulation of arteriolar diameter in skeletal muscle in situ. *Microvasc Res*. 1995;49(3):289-299.

37. Ley K, Pries AR, Gaehtgens P. A versatile intravital microscope design. *Int J Microcirc Clin Exp*. 1987;6(2):161-167.

38. Miller C, Moczydlowski E, Latorre R, Phillips M. Charybdotoxin, a protein inhibitor of single Ca^{2+}-activated K^{+} channels from mammalian skeletal muscle. *Nature*. 1985; 313(6000):316-318.

39. Brayden JE, Nelson MT. Regulation of arterial tone by activation of calcium-dependent potassium channels. *Science*. 1992;256(5056):532-535.

40. Nelson MT, Quayle JM. Physiological roles and properties of potassium channels in arterial smooth muscle. *Am J Physiol*. 1995;268:C799-C822.

41. de Wit C, Esser N, Lehr HA, Bolz SS, Pohl U. Pentobarbital-sensitive EDHF comediates ACh-induced arteriolar dilation in the hamster microcirculation. *Am J Physiol*. 1999;276: H1527-H1534.

42. Nagao T, Vanhoutte PM. Hyperpolarization as a mechanism for endothelium-dependent relaxations in the porcine coronary artery. *J Physiol*. 1992;445:355-367.

43. de Wit C, Schäfer C, von Bismarck P, Bolz SS, Pohl U. Elevation of plasma viscosity induces sustained NO-mediated dilation in the hamster cremaster microcirculation in vivo. *Pflügers Arch*. 1997;434(4):354-361.

44. Rosenblum WI, El Sabban F. Platelet aggregation in the cerebral microcirculation: effect of aspirin and other agents. *Circ Res*. 1977;40(3):320-328.

45. Koller A, Messina EJ, Wolin MS, Kaley G. Effects of endothelial impairment on arteriolar dilator responses in vivo. *Am J Physiol*. 1989;257:H1485-H1489.

46. Pries AR. A versatile video image analysis system for microcirculatory research. *Int J Microcirc Clin Exp*. 1988;7(4):327-345.

47. Griffith TM, Edwards DH, Davies RL, Harrison TJ, Evans KT. EDRF coordinates the behaviour of vascular resistance vessels. *Nature*. 1987;329(6138):442-445.

48. Koller A, Messina EJ, Wolin MS, Kaley G. Endothelial impairment inhibits prostaglandin and EDRF-mediated arteriolar dilation in vivo. *Am J Physiol*. 1989;257:H1966-H1970.

49. Nakamura T, Prewitt RL. Effect of N^G-monomethyl-L-arginine on arcade arterioles of rat spinotrapezius muscles. *Am J Physiol*. 1991;261:H46-H52.

50. Hecker M. Endothelium-derived hyperpolarizing factor - fact or fiction? *News Physiol Sci*. 2000;15:1-5.

51. Bolotina VM, Najibi S, Palacino JJ, Pagano PJ, Cohen RA. Nitric oxide directly activates calcium-dependent potassium channels in vascular smooth muscle. *Nature*. 1994;368:850-853.

52. Mülsch A, Busse R. N^G-nitro-L-arginine (N^5-[imino(nitroamino)methyl]-L-ornithine) impairs endothelium-dependent dilations by inhibiting cytosolic nitric oxide synthesis from L-arginine. *Naunyn Schmiedebergs Arch Pharmacol*. 1990;341(1-2):143-147.

53. Koller A, Kaley G. Prostaglandins mediate arteriolar dilation to increased blood flow velocity in skeletal muscle microcirculation. *Circ Res*. 1990;67(2):529-534.

54. Altura BM, Weinberg J. Urethane and contraction of vascular smooth muscle. *Br J Pharmacol*. 1979;67(2):255-263.

55. Büch HP, Büch U. Narkotika. In: Forth W, Henschler D, Rummel W, Starke K, editors. Allgemeine und spezielle Pharmakologie und Toxikologie für Studenten der Medizin, Veterinärmedizin, Pharmazie, Chemie, Biologie sowie Ärzte, Tierärzte und Apotheker. 7 ed. Heidelberg, Berlin, Oxford: Spektrum, Akademischer Verlag; 1996. p. 235-252.

56. Alvarez J, Montero M, Garcia-Sancho J. High affinity inhibition of Ca^{2+}-dependent K^+ channels by cytochrome P-450 inhibitors. *J Biol Chem*. 1992;267(17):11789-11793.

57. Graier WF, Simecek S, Sturek M. Cytochrome P450 mono-oxygenase-regulated signalling of Ca^{2+} entry in human and bovine endothelial cells. *J Physiol*. 1995;482:259-274.

58. Hwa JJ, Ghibaudi L, Williams P, Chatterjee M. Comparison of acetylcholine-dependent relaxation in large and small arteries of rat mesenteric vascular bed. *Am J Physiol*. 1994;266:H952-H958.

59. Bolz SS, de Wit C, Pohl U. Endothelium-derived hyperpolarizing factor but not NO reduces smooth muscle Ca^{2+} during acetylcholine-induced dilation of microvessels. *Br J Pharmacol*. 1999;128(1):124-134.

60. Klotz KF, Gaehtgens P, Pries AR. Does luminal release of EDRF contribute to downstream microvascular tone? *Pflügers Arch*. 1995;430(6):978-983.

61. de Wit C, von Bismarck P, Pohl U. Synergistic action of vasodilators that increase cGMP and cAMP in the hamster cremaster microcirculation. *Cardiovasc Res*. 1994; 28(10):1513-1518.

62. Sarelius IH, Maxwell LC, Gray SD, Duling BR. Capillarity and fiber types in the cremaster muscle of rat and hamster. *Am J Physiol*. 1983;245:H368-H374.

63. Takamura Y, Shimokawa H, Zhao H, Igarashi H, Egashira K, Takeshita A. Important role of endothelium-derived hyperpolarizing factor in shear stress-induced endothelium-dependent relaxations in the rat mesenteric artery. *J Cardiovasc Pharmacol*. 1999;34(3): 381-387.

64. Popp R, Fleming I, Busse R. Pulsatile stretch in coronary arteries elicits release of endothelium-derived hyperpolarizing factor: a modulator of arterial compliance. *Circ Res*. 1998;82(6):696-703.

65. Bauersachs J, Popp R, Hecker M, Sauer E, Fleming I, Busse R. Nitric oxide attenuates the release of endothelium-derived hyperpolarizing factor. *Circulation*. 1996;94(12): 3341-3347.

66. Bauersachs J, Popp R, Fleming I, Busse R. Nitric oxide and endothelium-derived hyperpolarizing factor: formation and interactions. *Prostaglandins Leukot Essent Fatty Acids*. 1997;57(4-5):439-446.

67. Vanhoutte PM. Endothelial dysfunction in hypertension. *J Hypertens*. 1996;14(Suppl 5): S83-S93.

68. Gauer OH. Mechanik des Gefäßsystems. In: Gauer OH, Kramer K, Jung R, editors. Physiologie des Menschen, Band 3, Herz und Kreislauf. München, Berlin, Wien: Urban & Schwarzenberg; 1972. p. 164-268.

69. Kiowski W. Endothelial function in humans. Studies of forearm resistance vessels. *Hypertension*. 1991;18(4 Suppl):II84-II89.

70. Yamamoto Y, Imaeda K, Suzuki H. Endothelium-dependent hyperpolarization and intercellular electrical coupling in guinea-pig mesenteric arterioles. *J Physiol*. 1999;514:505-513.

71. Christ GJ, Spray DC, el Sabban M, Moore LK, Brink PR. Gap junctions in vascular tissues. Evaluating the role of intercellular communication in the modulation of vasomotor tone. *Circ Res*. 1996;79(4):631-646.

72. Quignard JF, Feletou M, Thollon C, Vilaine JP, Duhault J, Vanhoutte PM. Potassium ions and endothelium-derived hyperpolarizing factor in guinea-pig carotid and porcine coronary arteries. *Br J Pharmacol*. 1999;127(1):27-34.

73. Vanhoutte PM. Vascular biology. Old-timer makes a comeback. *Nature*. 1998; 396(6708): 213-216.

74. Zygmunt PM, Högestätt ED. Role of potassium channels in endothelium-dependent relaxation resistant to nitroarginine in the rat hepatic artery. *Br J Pharmacol*. 1996; 117(7):1600-1606.