

7 Literaturverzeichnis

- ABDEL-ALEEM, S., ST LOUIS, J. D., HUGHES, G. C. LOWE, J. E. (1999)
Metabolic changes in the normal and hypoxic neonatal myocardium.
Ann N Y Acad Sci **874**: 254-61
- ACKERMAN, N. R. RAMM, G. M. (1971)
Effects of 5 days of hypoxia on the blood of chick embryos.
Teratology **4**(4): 445-52
- ACKERMAN, R. A. RAHN, H. (1981)
In vivo O₂ and water vapor permeability of the hen's eggshell during early development.
Respir Physiol **45**(1): 1-8
- AR, A. RAHN, H. (1985)
Pores in avian eggshells: gas conductance, gas exchange and embryonic growth rate.
Respir Physiol **61**(1): 1-20
- ARAI, A. E., PANTELY, G. A., ANSELONE, C. G., BRISTOW, J. BRISTOW, J. D. (1991)
Active downregulation of myocardial energy requirements during prolonged moderate ischemia in swine.
Circ Res **69**(6): 1458-69
- BARRY, W. H., POBER, J., MARSH, J. D., FRANKEL, S. R. SMITH, T. W. (1980)
Effects of graded hypoxia on contraction of cultured chick embryo ventricular cells.
Am J Physiol **239**(5): H651-7
- BAUMANN, R., HALLER, E. A., SCHONING, U. WEBER, M. (1986)
Hypoxic incubation leads to concerted changes of carbonic anhydrase activity and 2,3 DPG concentration of chick embryo red cells.
Dev Biol **116**(2): 548-51
- BAUMANN, R. MEUER, H. J. (1992)
Blood oxygen transport in the early avian embryo.
Physiol Rev **72**(4): 941-65
- BAUMANN, R., PADEKEN, S. HALLER, E. A. (1982)
Functional properties of embryonic chicken hemoglobins.
J Appl Physiol **53**(6): 1439-48
- BELLAIRS, R., OSMOND, M. (1998)
The Atlas of Chick Development. Academic Press
- BEZZEL, E., PRINZINGER, R. (1990)
Ornithologie.
Stuttgart, Ulmer Verlag
- BOUTILIER, R. G. (2001)
Mechanisms of cell survival in hypoxia and hypothermia.
J Exp Biol **204**(Pt 18): 3171-81

- BROWN, J. L. INGRAM, V. M. (1974)
Structural studies on chick embryonic hemoglobins.
J Biol Chem **249**(12): 3960-72
- BUDINGER, G. R., CHANDEL, N., SHAO, Z. H., LI, C. Q., MELMED, A., BECKER, L. B. SCHUMACKER, P. T. (1996)
Cellular energy utilization and supply during hypoxia in embryonic cardiac myocytes.
Am J Physiol **270**(1 Pt 1): L44-53
- BUSTIN, S. A. (2002)
Quantification of mRNA using real-time reverse transcription PCR (RT-PCR): trends and problems.
J Mol Endocrinol **29**(1): 23-39
- CATRON, T., MENDIOLA, M. A., SMITH, S. M., BORN, J. WALKER, M. K. (2001)
Hypoxia regulates avian cardiac Arnt and HIF-1alpha mRNA expression.
Biochem Biophys Res Commun **282**(2): 602-7
- CHEN, Z., HEIERHORST, J., MANN, R. J., MITCHELHILL, K. I., MICHELL, B. J., WITTERS, L. A., LYNCH, G. S., KEMP, B. E. STAPLETON, D. (1999)
Expression of the AMP-activated protein kinase beta1 and beta2 subunits in skeletal muscle.
FEBS Lett **460**(2): 343-8
- CIROTTA, C. ARANGI, I. (1989)
How do avian embryos breathe? Oxygen transport in the blood of early chick embryos.
Comp Biochem Physiol A **94**(4): 607-13
- CIROTTA, C., SCOTTO DI TELLA, A. GERACI, G. (1975)
The hemoglobins of the developing chicken embryos. Fractionation and globin composition of the individual component of total erythrocytes and of a single erythrocyte type.
Cell Differ **4**(2): 87-99
- COHEN, W. R., PIASECKI, G. J., COHN, H. E., YOUNG, J. B. JACKSON, B. T. (1984)
Adrenal secretion of catecholamines during hypoxemia in fetal lambs.
Endocrinology **114**(2): 383-90
- DAVIES, S. P., HELPS, N. R., COHEN, P. T. HARDIE, D. G. (1995)
5'-AMP inhibits dephosphorylation, as well as promoting phosphorylation, of the AMP-activated protein kinase. Studies using bacterially expressed human protein phosphatase-2C alpha and native bovine protein phosphatase-2AC.
FEBS Lett **377**(3): 421-5
- DAWES, C. M. SIMKISS, K. (1971)
The effects of respiratory acidosis in the chick embryo.
J Exp Biol **55**(1): 77-84
- DECKER, S. (2002)
Der langfristige Einfluss eines verminderten O₂-Angebotes während der Inkubation auf Catecholamine, Stoffwechselmetabolite sowie Hämatokrit und Hämoglobin im Blut von Hühner- und Entenembryonen.
Freie Universität Berlin

- DÖCKE, F. (1994)
Veterinärmedizinische Endokrinologie. Gustav Fischer Verlag
- DOLL, C., HOCHACHKA, P. HAND, S. (1994)
A Microcalorimetric Study of Turtle Cortical Slices: Insights into Brain Metabolic Depression.
J Exp Biol **191**(1): 141-53
- DORNER, G., MOHNIKE, A. STEINDEL, E. (1975)
On possible genetic and epigenetic modes of diabetes transmission.
Endokrinologie **66**(2): 225-7
- DORNER, G. PLAGEMANN, A. (1994)
Perinatal hyperinsulinism as possible predisposing factor for diabetes mellitus, obesity and enhanced cardiovascular risk in later life.
Horm Metab Res **26**(5): 213-21
- DÖRNER, K. (1976)
Hormones and brain differentiation.
Amsterdam, Oxford, N.Y.
- DRAGON, S., GLOMBITZA, S., GOTZ, R. BAUMANN, R. (1996)
Norepinephrine-mediated hypoxic stimulation of embryonic red cell carbonic anhydrase and 2,3-DPG synthesis.
Am J Physiol **271**(4 Pt 2): R982-9
- DRIEDZIC, W. R. GESSER, H. (1994)
Energy metabolism and contractility in ectothermic vertebrate hearts: hypoxia, acidosis, and low temperature.
Physiol Rev **74**(1): 221-58
- DUSSEAU, J. W. HUTCHINS, P. M. (1988)
Hypoxia-induced angiogenesis in chick chorioallantoic membranes: a role for adenosine.
Respir Physiol **71**(1): 33-44
- DZIALOWSKI, E. M., VON PLETTENBERG, D., ELMONOUFY, N. A. BURGGREN, W. W. (2002)
Chronic hypoxia alters the physiological and morphological trajectories of developing chicken embryos.
Comp Biochem Physiol A Mol Integr Physiol **131**(4): 713-24
- ECKERT, R. (1986)
Tierphysiologie.
Stuttgart; New York, Thieme
- EDWARDS, R. A., LUTZ, P. L. BADEN, D. G. (1989)
Relationship between energy expenditure and ion channel density in the turtle and rat brain.
Am J Physiol **257**(6 Pt 2): R1354-8
- EPPLE, A., GILL, T. S. NIBBIO, B. (1992)
The avian allantois: a depot for stress-released catecholamines.
Gen Comp Endocrinol **85**(3): 462-76

- ETSCHMANN, B. (2002)
Funktionelle Charakterisierung des ORF3- Proteins des Felinen Calicivirus. Inst. f. Med. Mikrobiologie.
München, LMU München
- FIRTH, J. D., EBERT, B. L., PUGH, C. W. RATCLIFFE, P. J. (1994)
Oxygen-regulated control elements in the phosphoglycerate kinase 1 and lactate dehydrogenase A genes: similarities with the erythropoietin 3' enhancer.
Proc Natl Acad Sci U S A **91**(14): 6496-500
- FREEMAN, B. M., VINCE, M. A (1974)
Development of the Avian Embryo.
London, Chapman and Hall Ltd.
- FREEMAN, W. M., WALKER, S. J. VRANA, K. E. (1999)
Quantitative RT-PCR: pitfalls and potential.
Biotechniques **26**(1): 112-22, 124-5
- GUPPY, M., FUERY, C. J. FLANIGAN, J. E. (1994)
Biochemical principles of metabolic depression.
Comp Biochem Physiol B Biochem Mol Biol **109**(2-3): 175-89
- HADDAD, J. J. (2002)
Oxygen-sensing mechanisms and the regulation of redox-responsive transcription factors in development and pathophysiology.
Respir Res **3**(1): 26
- HANCE, A. J., ROBIN, E. D., SIMON, L. M., ALEXANDER, S., HERZENBERG, L. A. THEODORE, J. (1980)
Regulation of glycolytic enzyme activity during chronic hypoxia by changes in rate-limiting enzyme content. Use of monoclonal antibodies to quantitate changes in pyruvate kinase content.
J Clin Invest **66**(6): 1258-64
- HARDIE, D. G. (2004)
The AMP-activated protein kinase pathway--new players upstream and downstream.
J Cell Sci **117**(Pt 23): 5479-87
- HARDIE, D. G. HAWLEY, S. A. (2001)
AMP-activated protein kinase: the energy charge hypothesis revisited.
Bioessays **23**(12): 1112-9
- HASHIMOTO, E., OGITA, T., NAKAOKA, T., MATSUOKA, R., TAKAO, A. KIRA, Y. (1994)
Rapid induction of vascular endothelial growth factor expression by transient ischemia in rat heart.
Am J Physiol **267**(5 Pt 2): H1948-54
- HAWLEY, S. A., DAVISON, M., WOODS, A., DAVIES, S. P., BERI, R. K., CARLING, D. HARDIE, D. G. (1996)
Characterization of the AMP-activated protein kinase kinase from rat liver and identification of threonine 172 as the major site at which it phosphorylates AMP-activated protein kinase.
J Biol Chem **271**(44): 27879-87

- HIGUCHI, R., DOLLINGER, G., WALSH, P. S. GRIFFITH, R. (1992)
Simultaneous amplification and detection of specific DNA sequences.
Biotechnology (N Y) **10**(4): 413-7
- HIGUCHI, R., FOCKLER, C., DOLLINGER, G. WATSON, R. (1993)
Kinetic PCR analysis: real-time monitoring of DNA amplification reactions.
Biotechnology (N Y) **11**(9): 1026-30
- HOCHACHKA, P. W. (1986)
Defense strategies against hypoxia and hypothermia.
Science **231**(4735): 234-41
- HOCHACHKA, P. W., BUCK, L. T., DOLL, C. J. LAND, S. C. (1996)
Unifying theory of hypoxia tolerance: molecular/metabolic defense and rescue mechanisms for surviving oxygen lack.
Proc Natl Acad Sci U S A **93**(18): 9493-8
- HONG, S. P., LEIPER, F. C., WOODS, A., CARLING, D. CARLSON, M. (2003)
Activation of yeast Snf1 and mammalian AMP-activated protein kinase by upstream kinases.
Proc Natl Acad Sci U S A **100**(15): 8839-43
- HOPPELER, H. FLUCK, M. (2003)
Plasticity of skeletal muscle mitochondria: structure and function.
Med Sci Sports Exerc **35**(1): 95-104
- HOPPELER, H., VOGT, M., WEIBEL, E. R. FLUCK, M. (2003)
Response of skeletal muscle mitochondria to hypoxia.
Exp Physiol **88**(1): 109-19
- HU, C. J., WANG, L. Y., CHODOSH, L. A., KEITH, B. SIMON, M. C. (2003)
Differential roles of hypoxia-inducible factor 1alpha (HIF-1alpha) and HIF-2alpha in hypoxic gene regulation.
Mol Cell Biol **23**(24): 9361-74
- HU, N. CLARK, E. B. (1989)
Hemodynamics of the stage 12 to stage 29 chick embryo.
Circ Res **65**(6): 1665-70
- HÜHNKE, A. TÖNHARDT, H. (2004)
Oxygen deficiency and blood-gas-state in the chorio-allantoic vein in the chicken embryo.
Avian & Poultry Biology Rev.: 132-136
- IVNITSKI-STEEL, I. D., SANCHEZ, A. WALKER, M. K. (2004)
2,3,7,8-tetrachlorodibenzo-p-dioxin reduces myocardial hypoxia and vascular endothelial growth factor expression during chick embryo development.
Birth Defects Res A Clin Mol Teratol **70**(2): 51-8
- IYER, N. V., KOTCH, L. E., AGANI, F., LEUNG, S. W., LAUGHNER, E., WENGER, R. H., GASSMANN, M., GEARHART, J. D., LAWLER, A. M., YU, A. Y. SEMENZA, G. L. (1998a)
Cellular and developmental control of O₂ homeostasis by hypoxia-inducible factor 1 alpha.
Genes Dev **12**(2): 149-62

- IYER, N. V., LEUNG, S. W. SEMENZA, G. L. (1998b)
The human hypoxia-inducible factor 1alpha gene: HIF1A structure and evolutionary conservation.
Genomics **52**(2): 159-65
- JENSEN, A., GARNIER, Y. BERGER, R. (1999)
Dynamics of fetal circulatory responses to hypoxia and asphyxia.
Eur J Obstet Gynecol Reprod Biol **84**(2): 155-72
- KELLER, A., OTT, M. O., LAMANDE, N., LUCAS, M., GROS, F., BUCKINGHAM, M. LAZAR, M. (1992)
Activation of the gene encoding the glycolytic enzyme beta-enolase during early myogenesis precedes an increased expression during fetal muscle development.
Mech Dev **38**(1): 41-54
- KUTCHAI, H. STEEN, J. B. (1971)
Permeability of the shell and shell membranes of hens' eggs during development.
Respir Physiol **11**(3): 265-78
- LAMANDE, N., BROSSET, S., LUCAS, M., KELLER, A., ROUZEAU, J. D., JOHNSON, T. R., GROS, F., ILAN, J. LAZAR, M. (1995)
Transcriptional up-regulation of the mouse gene for the muscle-specific subunit of enolase during terminal differentiation of myogenic cells.
Mol Reprod Dev **41**(3): 306-13
- LAMANDE, N., MAZO, A. M., LUCAS, M., MONTARRAS, D., PINSET, C., GROS, F., LEGAULT-DEMARE, L. LAZAR, M. (1989)
Murine muscle-specific enolase: cDNA cloning, sequence, and developmental expression.
Proc Natl Acad Sci U S A **86**(12): 4445-9
- LANGE, S. (2005)
Morphometrische Untersuchungen zur Entwicklung des Arbeitssmyokards von Hühnerembryonen unter normaler und sauerstoffreduzierter Bebrütungsluft.
Berlin, Freie Universität
- LEE, S. C. DOWNEY, H. F. (1993)
Downregulation of oxygen demand in isoprenaline stimulated canine myocardium.
Cardiovasc Res **27**(8): 1542-50
- LEFEBVRE, V. H., VAN STEENBRUGGE, M., BECKERS, V., ROBERFROID, M. BUC-CALDERON, P. (1993)
Adenine nucleotides and inhibition of protein synthesis in isolated hepatocytes incubated under different pO₂ levels.
Arch Biochem Biophys **304**(2): 322-31
- LEVY, A. P., LEVY, N. S., LOSCALZO, J., CALDERONE, A., TAKAHASHI, N., YEO, K. T., KOREN, G., COLUCCI, W. S. GOLDBERG, M. A. (1995)
Regulation of vascular endothelial growth factor in cardiac myocytes.
Circ Res **76**(5): 758-66
- LI, J., BROWN, L. F., HIBBERD, M. G., GROSSMAN, J. D., MORGAN, J. P. SIMONS, M. (1996)
VEGF, flk-1, and flt-1 expression in a rat myocardial infarction model of angiogenesis.
Am J Physiol **270**(5 Pt 2): H1803-11

- LINDEN, T., KATSCHINSKI, D. M., ECKHARDT, K., SCHEID, A., PAGEL, H. WENGER, R. H. (2003)
The antimycotic ciclopirox olamine induces HIF-1 α stability, VEGF expression, and angiogenesis.
Faseb J **17**(6): 761-3
- LIVAK, K. J. SCHMITTGEN, T. D. (2001)
Analysis of relative gene expression data using real-time quantitative PCR and the 2(-Delta Delta C(T)) Method.
Methods **25**(4): 402-8
- LOPASCHUK, G. D., SPAFFORD, M. A. MARSH, D. R. (1991)
Glycolysis is predominant source of myocardial ATP production immediately after birth.
Am J Physiol **261**(6 Pt 2): H1698-705
- LUTZ, P. L. NILSSON, G. E. (1997)
Contrasting strategies for anoxic brain survival--glycolysis up or down.
J Exp Biol **200**(Pt 2): 411-9
- MARSIN, A. S., BERTRAND, L., RIDER, M. H., DEPREZ, J., BEAULOYE, C., VINCENT, M. F., VAN DEN BERGHE, G., CARLING, D. HUE, L. (2000)
Phosphorylation and activation of heart PFK-2 by AMPK has a role in the stimulation of glycolysis during ischaemia.
Curr Biol **10**(20): 1247-55
- MARSIN, A. S., BOUZIN, C., BERTRAND, L. HUE, L. (2002)
The stimulation of glycolysis by hypoxia in activated monocytes is mediated by AMP-activated protein kinase and inducible 6-phosphofructo-2-kinase.
J Biol Chem **277**(34): 30778-83
- MATEO, J., GARCIA-LECEA, M., CADENAS, S., HERNANDEZ, C. MONCADA, S. (2003)
Regulation of hypoxia-inducible factor-1 α by nitric oxide through mitochondria-dependent and -independent pathways.
Biochem J **376**(Pt 2): 537-44
- MAULIK, N. DAS, D. K. (2002)
Potentiation of angiogenic response by ischemic and hypoxic preconditioning of the heart.
J Cell Mol Med **6**(1): 13-24
- MCCUTCHEON, I. E., METCALFE, J., METZENBERG, A. B. ETTINGER, T. (1982)
Organ growth in hyperoxic and hypoxic chick embryos.
Respir Physiol **50**(2): 153-63
- MICHIELS, C. (2004)
Physiological and pathological responses to hypoxia.
Am J Pathol **164**(6): 1875-82
- MINCHENKO, A., LESHCHINSKY, I., OPENTANOVA, I., SANG, N., SRINIVAS, V., ARMSTEAD, V. CARO, J. (2002)
Hypoxia-inducible factor-1-mediated expression of the 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase-3 (PFKFB3) gene. Its possible role in the Warburg effect.
J Biol Chem **277**(8): 6183-7

- MORRISON, T. B., WEIS, J. J. WITTEWER, C. T. (1998)
Quantification of low-copy transcripts by continuous SYBR Green I monitoring during amplification.
Biotechniques **24**(6): 954-8, 960, 962
- MORTOLA, J. P. (2004)
Implications of hypoxic hypometabolism during mammalian ontogenesis.
Respir Physiol Neurobiol **141**(3): 345-56
- MORTOLA, J. P. LABBE, K. (2005)
Oxygen consumption of the chicken embryo: interaction between temperature and oxygenation.
Respir Physiol Neurobiol **146**(1): 97-106
- MOYES, C. D. LEMOINE, C. M. (2005)
Control of muscle bioenergetic gene expression: implications for allometric scaling relationships of glycolytic and oxidative enzymes.
J Exp Biol **208**(Pt 9): 1601-10
- MULDER, A. L., GOLDE, J. M., GOOR, A. A., GIUSSANI, D. A. BLANCO, C. E. (2000)
Developmental changes in plasma catecholamine concentrations during normoxia and acute hypoxia in the chick embryo.
J Physiol **527 Pt 3**: 593-9
- MULDER, A. L., VAN GOLDE, J. C., PRINZEN, F. W. BLANCO, C. E. (1998)
Cardiac output distribution in response to hypoxia in the chick embryo in the second half of the incubation time.
J Physiol **508 (Pt 1)**: 281-7
- NAKAJIMA, H. (1995)
[Phosphofructokinase (PFK)].
Nippon Rinsho **53**(5): 1241-6
- NAU, P. N., VAN NATTA, T., RALPHE, J. C., TENEYCK, C. J., BEDELL, K. A., CALDARONE, C. A., SEGAR, J. L. SCHOLZ, T. D. (2002)
Metabolic adaptation of the fetal and postnatal ovine heart: regulatory role of hypoxia-inducible factors and nuclear respiratory factor-1.
Pediatr Res **52**(2): 269-78
- NECHAEVA, M. V. TURPAEV, T. M. (2002)
Rhythmic contractions in chick amnio-yolk sac and snake amnion during embryogenesis.
Comp Biochem Physiol A Mol Integr Physiol **131**(4): 861-70
- NICHELMANN, M., HOCHERL, J. TZSCHENTKE, B. (1999)
Biological rhythms in birds--development, insights and perspectives.
Comp Biochem Physiol A Mol Integr Physiol **124**(4): 429-37
- OBACH, M., NAVARRO-SABATE, A., CARO, J., KONG, X., DURAN, J., GOMEZ, M., PERALES, J. C., VENTURA, F., ROSA, J. L. BARTRONS, R. (2004)
6-Phosphofructo-2-kinase (pfkfb3) gene promoter contains hypoxia-inducible factor-1 binding sites necessary for transactivation in response to hypoxia.
J Biol Chem **279**(51): 53562-70

- OLSZOWKA, A. J., TAZAWA, H. RAHN, H. (1988)
A blood-gas nomogram of the chick fetus: blood flow distribution between the chorioallantois and fetus.
Respir Physiol **71**(3): 315-30
- OSTADAL, B., OSTADALOVA, I. DHALLA, N. S. (1999)
Development of cardiac sensitivity to oxygen deficiency: comparative and ontogenetic aspects.
Physiol Rev **79**(3): 635-59
- PFAFFL, M. W. (2001)
A new mathematical model for relative quantification in real-time RT-PCR.
Nucleic Acids Res **29**(9): e45
- PIIPER, J., TAZAWA, H., AR, A. RAHN, H. (1980)
Analysis of chorioallantoic gas exchange in the chick embryo.
Respir Physiol **39**(3): 273-84
- PILKIS, S. J. GRANNER, D. K. (1992)
Molecular physiology of the regulation of hepatic gluconeogenesis and glycolysis.
Annu Rev Physiol **54**: 885-909
- PLUNKETT, M. D., HENDRY, P. J., ANSTADT, M. P., CAMPORESI, E. M., AMATO, M. T., ST LOUIS, J. D. LOWE, J. E. (1996)
Chronic hypoxia induces adaptive metabolic changes in neonatal myocardium.
J Thorac Cardiovasc Surg **112**(1): 8-13
- POELLINGER, L. JOHNSON, R. S. (2004)
HIF-1 and hypoxic response: the plot thickens.
Curr Opin Genet Dev **14**(1): 81-5
- PONTICOS, M., LU, Q. L., MORGAN, J. E., HARDIE, D. G., PARTRIDGE, T. A. CARLING, D. (1998)
Dual regulation of the AMP-activated protein kinase provides a novel mechanism for the control of creatine kinase in skeletal muscle.
Embo J **17**(6): 1688-99
- RADDATZ, E., SERVIN, M. KUCERA, P. (1992)
Oxygen uptake during early cardiogenesis of the chick.
Am J Physiol **262**(4 Pt 2): H1224-30
- RIGGS, A. D., RUSSO, V. E. A. MARTIENSSEN, R. A. (1996)
Epigenetic mechanisms of gene regulation.
- RIGGS, A. F. (1998)
Self-association, cooperativity and supercooperativity of oxygen binding by hemoglobins.
J Exp Biol **201**(Pt 8): 1073-84
- ROLAND, I., MINET, E., ERNEST, I., PASCAL, T., MICHEL, G., REMACLE, J. MICHIELS, C. (2000)
Identification of hypoxia-responsive messengers expressed in human microvascular endothelial cells using differential display RT-PCR.
Eur J Biochem **267**(12): 3567-74

- ROLFE, D. F. BRAND, M. D. (1996)
Contribution of mitochondrial proton leak to skeletal muscle respiration and to standard metabolic rate.
Am J Physiol **271**(4 Pt 1): C1380-9
- ROLFE, D. F. BROWN, G. C. (1997)
Cellular energy utilization and molecular origin of standard metabolic rate in mammals.
Physiol Rev **77**(3): 731-58
- ROMANO, R., ROCHAT, A. C., KUCERA, P., DE RIBAUPIERRE, Y. RADDATZ, E. (2001)
Oxidative and glycogenolytic capacities within the developing chick heart.
Pediatr Res **49**(3): 363-72
- ROMANOFF, A. L. (1960)
The Avian Embryo.
New York, The MacMullan Company
- ROMANOFF, A. L. (1967)
Biochemistry of the Avian Embryo.
New York, Wiley-Interscience
- ROMANOFF, A. L. (1972)
Pathogenesis of the avian embryo.
New York, London, Sidney, Toronto
- RUIJTENBEEK, K., KESSELS, C. G., VILLAMOR, E., BLANCO, C. E. DE MEY, J. G. (2002)
Direct effects of acute hypoxia on the reactivity of peripheral arteries of the chicken embryo.
Am J Physiol Regul Integr Comp Physiol **283**(2): R331-8
- RUIJTENBEEK, K., LE NOBLE, F. A., JANSSEN, G. M., KESSELS, C. G., FAZZI, G. E., BLANCO, C. E. DE MEY, J. G. (2000)
Chronic hypoxia stimulates periarterial sympathetic nerve development in chicken embryo.
Circulation **102**(23): 2892-7
- SARASA, M. CLIMENT, S. (1987)
Effects of catecholamines on early development of the chick embryo: relationship to effects of calcium and cAMP.
J Exp Zool **241**(2): 181-90
- SCHOFIELD, C. J. RATCLIFFE, P. J. (2004)
Oxygen sensing by HIF hydroxylases.
Nat Rev Mol Cell Biol **5**(5): 343-54
- SEMENZA, G. L. (1999)
Regulation of mammalian O₂ homeostasis by hypoxia-inducible factor 1.
Annu Rev Cell Dev Biol **15**: 551-78
- SEMENZA, G. L. (2001)
Hypoxia-inducible factor 1: control of oxygen homeostasis in health and disease.
Pediatr Res **49**(5): 614-7

- SEMENZA, G. L., ROTH, P. H., FANG, H. M. WANG, G. L. (1994)
Transcriptional regulation of genes encoding glycolytic enzymes by hypoxia-inducible factor 1.
J Biol Chem **269**(38): 23757-63
- SHIELDS, H. E., KOLESARI, G. L. KUHLMANN, R. S. (1990)
Tissue and plasma levels of a teratogenic dose of dopamine in the chick embryo following pretreatment with metoprolol or phosphate buffered saline.
Life Sci **46**(16): 1181-8
- SNYDER, G. K., BYERS, R. L. KAYAR, S. R. (1984)
Effects of hypoxia on tissue capillarity in geese.
Respir Physiol **58**(2): 151-60
- STAPLETON, D., MITCHELHILL, K. I., GAO, G., WIDMER, J., MICHELL, B. J., TEH, T., HOUSE, C. M., FERNANDEZ, C. S., COX, T., WITTERS, L. A. KEMP, B. E. (1996)
Mammalian AMP-activated protein kinase subfamily.
J Biol Chem **271**(2): 611-4
- STARCK, J. M. (1998)
Avian Growth and Development. Oxford University Press
- STEIN, S. C., WOODS, A., JONES, N. A., DAVISON, M. D. CARLING, D. (2000)
The regulation of AMP-activated protein kinase by phosphorylation.
Biochem J **345 Pt 3**: 437-43
- STEVENS, L. (1996)
Avian Biochemistry and Molecular Biology. Cambridge University Press
- STRICK, D. M., WAYCASTER, R. L., MONTANI, J. P., GAY, W. J. ADAIR, T. H. (1991)
Morphometric measurements of chorioallantoic membrane vascularity: effects of hypoxia and hyperoxia.
Am J Physiol **260**(4 Pt 2): H1385-9
- STRYER, L. (2003)
Biochemie.
- SUGISHITA, Y., TAKAHASHI, T., SHIMIZU, T., YAO, A., KINUGAWA, K., SUGISHITA, K., HARADA, K., MATSUI, H. NAGAI, R. (2000)
Expression of genes encoding vascular endothelial growth factor and its Flk-1 receptor in the chick embryonic heart.
J Mol Cell Cardiol **32**(6): 1039-51
- TAKAHASHI, T., SUGISHITA, Y., NOJIRI, T., SHIMIZU, T., YAO, A., KINUGAWA, K., HARADA, K. NAGAI, R. (2001)
Cloning of hypoxia-inducible factor 1alpha cDNA from chick embryonic ventricular myocytes.
Biochem Biophys Res Commun **281**(4): 1057-62
- TAZAWA, H., HASHIMOTO, Y., NAKAZAWA, S. WHITTOW, G. C. (1992)
Metabolic responses of chicken embryos and hatchlings to altered O₂ environments.
Respir Physiol **88**(1-2): 37-50

- TAZAWA, H., MIKAMI, T. YOSHIMOTO, C. (1971a)
Effect of reducing the shell area on the respiratory properties of chicken embryonic blood.
Respir Physiol **13**(3): 352-60
- TAZAWA, H., MIKAMI, T. YOSHIMOTO, C. (1971b)
Respiratory properties of chicken embryonic blood during development.
Respir Physiol **13**(2): 160-70
- TAZAWA, H. MOCHIZUKI, M. (1977)
Oxygen analyses of chicken embryo blood.
Respir Physiol **31**(2): 203-15
- TAZAWA, H., VISSCHEDIJK, A. H. PIIPER, J. (1983)
Blood gases and acid-base status in chicken embryos with naturally varying egg shell conductance.
Respir Physiol **54**(2): 137-44
- THORBURN, G. D., HARDING, R. (1994)
Textbook of Fetal Physiology.
Oxford, University Press
- THORNTON, C., SNOWDEN, M. A. CARLING, D. (1997)
Identification of a novel AMPK beta subunit that is highly expressed in skeletal muscle.
Biochem Soc Trans **25**(4): S667
- THRASH-BINGHAM, C. A. TARTOF, K. D. (1999)
aHIF: a natural antisense transcript overexpressed in human renal cancer and during hypoxia.
J Natl Cancer Inst **91**(2): 143-51
- TIAN, R., MUSI, N., D'AGOSTINO, J., HIRSHMAN, M. F. GOODYEAR, L. J. (2001)
Increased adenosine monophosphate-activated protein kinase activity in rat hearts with pressure-overload hypertrophy.
Circulation **104**(14): 1664-9
- TOMASCHEK, E. (1997)
Der Einfluss einer kurzzeitigen Hypothermie auf die Catecholamin-konzentrationen in Körperflüssigkeiten von Hühnerembryonen verschiedenen Alters.
Berlin, Freie Universität
- TÖNHARDT, H. (2004)
Influence of incubation temperature on the Noradrenaline concentration in blood plasma and cAMP content in heart muscles cells of chicken embryo.
Avian & Poultry Biology Rev.
- TRAN, L., KUCERA, P., DE RIBAUPIERRE, Y., ROCHAT, A. C. RADDATZ, E. (1996)
Glucose is arrhythmogenic in the anoxic-reoxygenated embryonic chick heart.
Pediatr Res **39**(5): 766-73
- TULLETT, S. G. BURTON, F. G. (1985)
The effects of eggshell porosity on blood-gas and acid-base status of domestic fowl embryos within eggs of the same weight.
Comp Biochem Physiol A **81**(1): 137-42

- TZSCHENTKE, B. BASTA, D. (2002)
Early development of neuronal hypothalamic thermosensitivity in birds: influence of epigenetic temperature adaptation.
Comp Biochem Physiol A Mol Integr Physiol **131**(4): 825-32
- VAN LIESHOUT, T., STANISZ, J., ESPIRITU, V., RICHARDSON, M. SINGH, G. (2003)
A hypoxic response induced in MatLyLu cells by cobalt chloride results in an enhanced angiogenic response by the chick chorioallantoic membrane.
Int J Oncol **23**(3): 745-50
- VESTERGAARD, H. (1999)
Studies of gene expression and activity of hexokinase, phosphofructokinase and glycogen synthase in human skeletal muscle in states of altered insulin-stimulated glucose metabolism.
Dan Med Bull **46**(1): 13-34
- VILLAMOR, E., KESSELS, C. G., RUIJTENBEEK, K., VAN SUYLEN, R. J., BELIK, J., DE MEY, J. G. BLANCO, C. E. (2004)
Chronic in ovo hypoxia decreases pulmonary arterial contractile reactivity and induces biventricular cardiac enlargement in the chicken embryo.
Am J Physiol Regul Integr Comp Physiol **287**(3): R642-51
- VON BLUMRODER, D. TONHARDT, H. (2002)
Influence of long-term changes in incubation temperature on catecholamine levels in plasma of chicken embryos (*Gallus gallus f. domestica*).
Comp Biochem Physiol A Mol Integr Physiol **131**(4): 701-11
- WANG, G. L., JIANG, B. H., RUE, E. A. SEMENZA, G. L. (1995)
Hypoxia-inducible factor 1 is a basic-helix-loop-helix-PAS heterodimer regulated by cellular O₂ tension.
Proc Natl Acad Sci U S A **92**(12): 5510-4
- WANGENSTEEN, O. D. RAHN, H. (1970)
Respiratory gas exchange by the avian embryo.
Respir Physiol **11**(1): 31-45
- WARDEN, S. M., RICHARDSON, C., O'DONNELL, J., JR., STAPLETON, D., KEMP, B. E. WITTERS, L. A. (2001)
Post-translational modifications of the beta-1 subunit of AMP-activated protein kinase affect enzyme activity and cellular localization.
Biochem J **354**(Pt 2): 275-83
- WEBSTER, K. A. (1987)
Regulation of glycolytic enzyme RNA transcriptional rates by oxygen availability in skeletal muscle cells.
Mol Cell Biochem **77**(1): 19-28
- WEBSTER, K. A. (2003)
Evolution of the coordinate regulation of glycolytic enzyme genes by hypoxia.
J Exp Biol **206**(Pt 17): 2911-22
- WEISSER, M., HAFERLACH, T., SCHOCH, C., HIDDEMANN, W. SCHNITTGER, S. (2004)
The use of housekeeping genes for real-time PCR-based quantification of fusion gene transcripts in acute myeloid leukemia.
Leukemia **18**(9): 1551-3

- WIENER, C. M., BOOTH, G. SEMENZA, G. L. (1996)
In vivo expression of mRNAs encoding hypoxia-inducible factor 1.
Biochem Biophys Res Commun **225**(2): 485-8
- WILHELM, J. PINGOUD, A. (2003)
Real-time polymerase chain reaction.
Chembiochem **4**(11): 1120-8
- WITTMANN, J. PRECHTL, J. (1991)
Respiratory function of catecholamines during the late period of avian development.
Respir Physiol **83**(3): 375-86
- WOJTASZEWSKI, J. F., NIELSEN, J. N., JORGENSEN, S. B., FROSIG, C., BIRK, J. B. RICHTER, E. A. (2003)
Transgenic models--a scientific tool to understand exercise-induced metabolism: the regulatory role of AMPK (5'-AMP-activated protein kinase) in glucose transport and glycogen synthase activity in skeletal muscle.
Biochem Soc Trans **31**(Pt 6): 1290-4
- WOODS, A., CHEUNG, P. C., SMITH, F. C., DAVISON, M. D., SCOTT, J., BERI, R. K. CARLING, D. (1996)
Characterization of AMP-activated protein kinase beta and gamma subunits. Assembly of the heterotrimeric complex in vitro.
J Biol Chem **271**(17): 10282-90
- YU, A. Y., FRID, M. G., SHIMODA, L. A., WIENER, C. M., STENMARK, K. SEMENZA, G. L. (1998)
Temporal, spatial, and oxygen-regulated expression of hypoxia-inducible factor-1 in the lung.
Am J Physiol **275**(4 Pt 1): L818-26
- YUE, X. TOMANEK, R. J. (2001)
Effects of VEGF(165) and VEGF(121) on vasculogenesis and angiogenesis in cultured embryonic quail hearts.
Am J Physiol Heart Circ Physiol **280**(5): H2240-7
- ZHANG, X., DING, L. SANDFORD, A. J. (2005)
Selection of reference genes for gene expression studies in human neutrophils by real-time PCR.
BMC Mol Biol **6**(1): 4