

VIII. Literaturverzeichnis

ALEXANDER, R.W., GALPER, J.B., NEER, E.J., SMITH, T.W. (1982)

Non-co-ordinate development of beta-adrenergic receptors and adenylate cyclase in chick heart.

Biochem. J. **204**, 825-830

ARKESTER, A.R. (1984)

The cardiovascular system.

In: Freeman, B.M., Physiology and Biochemistry of the Domestic Fowl, Vol. V.

Academic Press, London, 172-262

ASSALI, N.S., BRINKMAN, C.R. 3rd, WOODS, J.R. Jr, DANDAVINO, A., NUWAYHID, B. (1977)

Development of neurohumoral control of fetal, neonatal and adult cardiovascular functions.

Am. J. Obstet. Gynecol. **129**, 748-759

BAPTISTA, C.A., KIRBY, M.L. (1997)

The cardiac ganglia: cellular and molecular aspects.

Kaohsiung J. Med. Sci. **13**, 42-54

BAUMEL, J. J., KING, A. S., BREAZILE, J. E., EVANS, H. E., BERGE J. C. V. (1993)

Handbook of avian anatomy: Nomina anatomica avium., 2 Aufl.,

Nuttall Ornithological Club, Cambridge, Massachusetts

BEATTIE, J., SMITH, A.H. (1975)

Metabolic adaptation of the chick embryo to chronic hypoxia.

Am. J. Physiol. **228**, 1346-1350

BENZO, C.A. (1986)

Nervous System.

In: Sturkie, P.D., Avian Physiology.

Springer-Verlag, New York, 1-36

BIEGON, R.L., PAPPANO, A.J. (1980)

Dual mechanism for inhibition of calcium-dependent action potentials by acetylcholine in avian ventricular muscle. Relationship to cyclic AMP.
Circ. Res. **46**, 353-362

von BLUMROEDER, D., TÖNHARDT, 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 **131** (4), 701-711

BOEHM, C., JOHNSON, T.R., CASTON, J.D., PRZYBYLSKI, R.J. (1987)

Cardiac hypertrophy in chick embryos induced by hypothermia.
Am. J. Physiol. **252**, C97-104

BOGUE, J.Y. (1932)

The heart rate of the developing chick.
J. Exp. Biol. **9**, 351-358

BROWN, J.H., BROWN, S.L. (1984)

Agonists differentiate muscarinic receptors that inhibit cyclic AMP formation from those that stimulate phosphoinositide metabolism.
J. Biol. Chem. **259**, 3777-37781

BURGGREN, W. (1999)

Developmental physiology, animal models and the August Krogh Principle.
Zoology **102**, 148-156

BURGGREN, W. (1998)

Studying physiological development : past, present and future.
Biol. Bull. NTNU. **33**, 71-84

BUTLER, P.J. (1967)

Effect of progressive hypoxia on the respiratory & cardiovascular system of chickens.
J. Physiol. **191**, 309-324

CAIN, J.R., ABBOTT, U.K., ROGALLO, V.L. (1967)

Heart rate of the developing chick embryo.

Proc. Soc. Exp. Biol. Med. **126**, 507-510

CALLINGHAM, B.A., CASS, R. (1966)

Catecholamines in the chick.

In: Horton-Smith, C., Amoroso, E.C. (eds.), Physiology of the domestic fowl.

Oliver & Boyd, Edinburgh, 279-285

CARSIA, R.V., HARVEY, s. (2000)

Adrenals.

In: Sturkie, P.D., Avian Physiology.

Springer-Verlag, New York

CARTER, A. (1993)

Fetal placental circulation.

In: Hanson, M.A., Spencer, J.A.D., Rodeck, C.H. (eds.), Fetus and Neonate Physiology and Clinical Applications.

Cambridge University, Cambridge UK, 116-136

CHESS-WILLIAMS, R., AUSTIN, C.E., O'BRIEN, H.L. (1991)

Alpha-adrenoceptors do not contribute to the chronotropic or inotropic responses of the avian heart to noradrenaline.

J. Auton. Pharmacol. **11**, 27-35

CHRISTENSEN, V.L., EDENS, F.W. (1989)

Blood plasma catecholamine concentration of poult embryos during the transition from diffusive to convective respiration.

Comp. Biochem. Physiol. B, **92**, 549-553

CIROTTO, C., ARANGI, I. (1989)

How do avian embryos breathe? Oxygen transport in the blood of early chick embryos.

Comp. Biochem. Physiol. A, **94**, 607-613

CLARK, E.B., HU, N. (1990)

Hemodynamics of the developing cardiovascular system.

Ann. N. Y. Acad. Sci. **588**, 41-47

COHN, A.E. (1925)

On the heart beat during the development of the chicken embryos.

J. Exp. Med. **42**, 291 p.p.

CROSSLEY, D. 2nd, ALTIMIRAS, J. (2000)

Ontogeny of cholinergic and adrenergic cardiovascular regulation in the domestic chicken (*Gallus gallus*).

Am. J. Physiol. Regul. Integr. Comp. Physiol. **279**, R1091-R1098

DAWES, C.M. (1980)

The effect of cooling the egg on the respiratory movements of the hatching fowl, *Gallus g. domesticus*, with a note on vocalization.

Comp. Biochem. Physiol. A **68**, 399-404

DECUYPERE, E. (1979)

Effects of incubation temperature patterns on morphological, physiological and reproduction criteria in Rhode Islands Red Birds.

Agricultura **27**, 66-280

DECUYPERE, E., DEWIL, E., KÜHN, E.R. (1990)

The hatching process and the role of hormones.

In: Tullet, S.G., Avian Incubation.

Butterworth-Heinemann, Oxford, 1194-1201

DEETJEN, P., SPECKMANN, E.-J. (1999)

Physiologie, 3. Aufl.,

Urban & Schwarzenberg, München, Wien, Baltimore

DÖRNER, M., TÖNHARDT, H., JACOBS, S. (1995)

Herzfrequenz-Variabilität beim Hühnerembryo.

In: Prinziger, R., Schraub R. (eds.), 2. Workshop, Prae-, Peri- and postnatal processes of adaptation. Johann-Wolfgang Goethe University Frankfurt/Main Department "Metabolic Physiologie", 1-17

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**, R982-R989

EPPEL, A., GILL, T.S., NIBBIO, B. (1992)

The avian allantois: a depot for stress-released catecholamines.

Gen. Comp. Endocrinol. **85**, 462-476

EPSTEIN, P.M., ANDRENYAK, D.M., SMITH, C.J., PAPPANO, A.J. (1987)

Ontogenetic changes in adenylate cyclase, cyclic AMP phosphodiesterase and calmodulin in chick ventricular myocardium.

Biochem. J. **243**, 525-531

FREEMAN, B. M. (1964)

Studies on the oxygen requirements and hatching mechanisms of the domestic fowl.

Ph.D.thesis, University of Leicester

FREEMAN, B. M., VINCE, M. A. (1974)

Development of the Avian Embryo.

Chapman and Hall, London

FRENCH N. A. (1994)

Effects of incubation temperature on the gross pathology of turkey embryos.

Br. Poult. Sci. **35**, 363-371

FUJITA, H., TANIZAWA, Y., HIURA, M. (1976)

Ontogenesis of granule formation in adrenal chromaffin cells of the chick.

In: Coupland, R., Fujita, H. (eds), Chromaffin, Enterochromaffin and Related cells.

Elsevier, Amsterdam, 191-208

FUJIWARA, T., ADAMS, F.H., NOZAKI, M., DERMER, G.B. (1970)

Pulmonary surfactant phospholipids from turkey lung: comparison with rabbit lung.

Am. J. Physiol. **218**, 218-225

GIRARD, H. (1973a)

Arterial pressure in the chick embryo.

Am. J. Physiol. **224**, 454-460

GIRARD, H. (1973b)

Adrenergic sensitivity of circulation in the chick embryo.

Am. J. Physiol. **224**, 461-469

GIRARD, H., MUFFAT-JOLY, M. (1971)

Development of blood pO₂ and pH in the chicken embryo during growth.

Pflügers Arch. **328**, 21-35

GOTTLIEB, G., KUO, Z.-Y. (1965)

Development of behavior in the duck embryo.

J. Comp. Physiol. Psychol. **59**, 183-188

HABECKER, B.A., NATHANSON, N.M. (1992)

Regulation of muscarinic acetylcholine receptor mRNA expression by activation of homologous and heterologous receptors.

Proc. Natl. Acad. Sci. U S A. **89**, 5035-5038

HABECKER, B.A., WANG, H., NATHANSON, N.M. (1993)

Multiple second-messenger pathways mediate agonist regulation of muscarinic receptor mRNA expression.

Biochemistry **32**, 4986-4990

HALVORSEN, S.W., NATHANSON, N.M. (1981)

In vivo regulation of muscarinic acetylcholine receptor number and function in embryonic chick heart.

J. Biol. Chem. **256**, 7941-7948

HIGGINS, D., PAPPANO, A.J. (1981)

Developmental changes in the sensitivity of the chick embryo ventricle to beta-adrenergic agonist during adrenergic innervation.

Circ. Res. **48**, 245-253

HOLLAND, S. (1998)

Untersuchungen zum Einfluss der Umgebungstemperatur auf Herzfrequenz, periphere Durchblutung und Temperatur bei Vogelembryonen.

Dissertation, Freie Universität, Berlin

HOSEY, M.M., GREEN, R.D. (1977)

Effects of isoproterenol on cyclic AMP and cyclic AMP-dependent protein kinase in developing chick myocardium.

Biochem. Biophys. Acta **500**, 152-161

HOUILLON, Ch. (1972)

Embryologie: Die Entwicklung der Organe, Organgenese.

Vieweg-Verlag, Braunschweig

HU, N., CLARK, E.B. (1989)

Hemodynamics of the stage 12 to stage 29 chick embryo.

Circ. Res. **65**, 1665-1670

HUNTER, D.D., NATHANSON, N.M. (1986)

Biochemical and physical analyses of newly synthesized muscarinic acetylcholine receptors in cultured embryonic chicken cardiac cells.

J. Neurosci. **6**, 3739-3748

HYLKA, V.W., DONEEN, B.A. (1982)

Lung phospholipids in the embryonic and immature chicken: changes in lipid composition and biosynthesis during maturation of the surfactant system.

J. Exp. Zool. **220**, 71-80

HYLKA, V.W., DONEEN, B.A. (1983)

Ontogeny of embryonic chicken lung: effects of pituitary gland, corticosterone, and other hormones upon pulmonary growth and synthesis of surfactant phospholipids.

Gen. Comp. Endocrinol. **52**, 108-120

IGNARRO, L.J., SHIDEMAN, F.E. (1968)

Norepinephrine and epinephrine in the embryo and embryonic heart of the chick: uptake and subcellular distribution.

J. Pharmacol. Exp. Ther. **159**, 49-58

ISAACKS, R.E., HARKNESS, D.R., ADLER, J.L., GOLDMAN, P.H. (1976)

Studies on avian erythrocyte metabolism. Effect of organic phosphates on oxygen affinity of embryonic and adult-type hemoglobins of the chick embryo.

Arch. Biochem. Biophys. **173**, 114-120

JACKSON, D.A., NATHANSON, N.M. (1995)

Subtype-specific regulation of muscarinic receptor expression and function by heterologous receptor activation.

J. Biol. Chem. **270**, 22374-22377

JOHANSEN, K., REITE, O.B. (1964)

Cardiovascular responses to vagal stimulation and cardioaccelerator nerve blockade in birds.

Comp. Biochem. Physiol. **12**, 479-487

JONES, C.T., LAGERCRANTZ, H. (1984)

Catecholamines in perinatal medicine: conclusion.

In: Carlsson, A., Dahlstrom, A., Engel, J., Usdin, E. (eds.), Catecholamines.

Liss Press, New York, 143 p.p.

JONES, D.R., JOHANSON, K. (1972)

The blood vascular system of birds.

In: Avian Biology.

Academic Press, New York

KIRBY, M.L., STEWART, D.E. (1986)

Development of the ANS innervation of the avian heart.

In: Gootman, P.M., Developmental neurobiology of the autonomic nervous system.

Humana Press, Clifton, New Jersey, 135-158

KLEMM, C. (2002)

Bestimmung von Catecholaminen, Cortisol, 3,2-Diphosphoglycerat und Glycose im Blut von Entenembryonen (*Cairina moschata*) unter dem Einfluss verschiedener Bruttemperaturen sowie unter Berücksichtigung der Lage und des internal pipping der Embryonen.

Dissertation, Freie Universität, Berlin

KOIDE, M., TUAN, R.S. (1989)

Adrenergic regulation of calcium-deficient hypertension in chick embryos.

Am. J. Physiol. **257**, H1900-H1909

VIII. Literaturverzeichnis

- KÜHN, E.R., DECUYPERE, E., COLEN, L.M., MICHELS, H. (1982)
Posthatch growth and development of a circadian rythm for thyroid hormones in chicks incubated at different temperatures.
Poult. Sci. **61**, 540-549
- KURODA, O., MATSUNAGA, C., WHITTOW, G.C., TAZAWA, H. (1990)
Comparative metabolic responses to prolonged cooling in precocial duck (*Anas domestica*) and altricial pigeon (*Columba domestica*) embryos.
Comp. Biochem. Physiol. A, **95**, 407-410
- LACOMBE, A.M., JONES, D.R. (1990)
The source of circulating catecholamines in forced dived ducks.
Gen. Comp. Endocrinol. **80**, 41-47
- LAGERCRANTZ, H., SLOTKIN, T.A. (1986)
The "stress" of being born.
Sci. Am. **254**, 100-107
- LAMBSON, R.O., COHN, J.E. (1968)
Ultrastructure of the lung of the goose and its lining of surface material.
Am. J. Anat. **122**, 631-649
- LAU, C., SLOTKIN, T.A. (1982)
Maturation of sympathetic neurotransmission in the rat heart. VIII. Slowed development of noradrenergic synapses resulting from hypothyroidism.
J. Pharmacol. Exp. Ther. **220**, 629-636
- LE NOBLE, F.A., RUIJTENBEEK, K., GOMMERS, S., DE MEY, J.G., BLANCO, C.E. (2000)
Contractile and relaxing reactivity in carotid and femoral arteries of chicken embryos.
Am. J. Physiol. Heart Circ. Physiol. **278**, H1261-H1268
- LIPSHULTZ, S., SHANFELD, J., CHACKO, S. (1981)
Emergence of beta-adrenergic sensitivity in the developing chicken heart.
Proc. Natl. Acad. Sci. U S A **78**, 288-292
- MALBON, C.C., RAPIEJKO, P.J., WATKINS, D.C. (1988)
Permissive hormone regulation of hormone-sensitive effector systems.
Trends Pharmacol. Sci. **9**, 33-36

MARSH, J.D., BARRY, W.H., SMITH, T.W. (1982)

Desensitization to the inotropic effect of isoproterenol in cultured ventricular cells.

J. Pharmacol. Exp. Ther. **223**, 60-67

MARSH, J.D., LACHANCE, D., KIM, D. (1985)

Mechanisms of beta-adrenergic receptor regulation in cultured chick heart cells. Role of cytoskeleton function and protein synthesis.

Circ. Res. **57**, 171-181

McCARTY, L.P., LEE, W.C., SHIDEMANN, F.E. (1960)

Measurement of the inotropic effects of drugs on the innervated and noninnervated embryonic chick heart.

J. Pharmacol. Exp. Ther. **129**, 315-321

McCUTCHEON, I.E., METCALFE, J., METZENBERG, A.B., ETTINGER, T. (1982)

Organ growth in hyperoxic and hypoxic chick embryos.

Respir. Physiol. **50**, 153-163

MCLEAN, M.J., LAPSLY, R.A., SHIGENOBU, K., MURAD, F., SPERELAKIS, N. (1975)

High cyclic AMP levels in young chick embryonic hearts.

Dev. Biol. **42**, 196-201

MERKOW, L., LEIGHTON, J. (1966)

Increased numbers of annulate lamellae in myocardium of chick embryos incubated at abnormal temperatures.

J. Cell. Biol. **28**, 127-137

MERKOW, L., LEIGHTON, J. (1967)

Temperature-induced experimental myocardial hypertrophy in chick embryos. An electron-microscopic and chemical study.

Am. J. Pathol. **50**, 975-991

METCALFE, J., STOCK, M.K. (1993)

Current topic: oxygen exchange in the chorioallantoic membrane, avian homologue of the mammalian placenta.

Placenta **14**, 605-613

van MIEROP, L.H., BERTUCH, C.J. Jr (1967)

Development of arterial blood pressure in the chick embryo.

Am. J. Physiol. **212**, 43-48

MISSALE, C., NASH, S.R., ROBINSON, S.W., JABER, M., CARON, M.G. (1998)

Dopamine receptors: from structure to function.

Physiol. Rev. **78**, 189-225

MODREY, P. (1995)

Die postnatale Entwicklung der Temperaturregulation und des Stoffwechsels von Putenküken (*Meleagris gallopavo*) unter dem Einfluss der Bruttemperatur.

Shaker-Verlag, Aachen

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** (1), 281-287

MULDER, T.L., VAN GOLDE, J.C., PRINZEN, F.W., BLANCO, C.E. (1997)

Cardiac output distribution in the chick embryo from stage 36 to 45.

Cardiovasc. Res. **34**, 525-528

NICHELMANN, M. (1992)

Embryonale Entwicklung beim Geflügel.

In: Heider, G., Monreal, G., Meszaros, A. (Hrsg.),

Krankheiten des Wirtschaftsgeflügels.

Fischer-Verlag, Jena, Stuttgart

PAPPANO, A.J. (1975)

Development of the autonomic neuroeffector transmission in the chick embryo heart.

In: Liebermann, M., Sano, T. (eds.), Developmental and physiological correlates of cardiac muscle.

Raven Press, New York, 235-248

PAPPANO, A.J., LOFFELHOLZ, K. (1974)

Ontogenesis of adrenergic and cholinergic neuroeffector transmission in chick embryo heart.

J. Pharmacol. Exp. Ther. **191**, 468-478

PETRIK, P., RIEDEL, B. (1968a)

An osmophilic bilaminar lining film at the respiratory surfaces of avian lungs.

Z. Zellforsch. Mikrosk. Anat. **88**, 204-219

PETRIK, P., RIEDEL, B. (1968b)

A continuous osmophilic noncellular membrane at the respiratory surface of the lungs of fetal chickens and of young chicks.

Lab. Invest. **18**, 54-62

PIROW, R. (1995)

Entwicklung der Herztätigkeit im letzten Drittel der Embryonalentwicklung der Moschusente (*Cairina moschata*).

Shaker-Verlag , Aachen

von PLETTENBERG, D. T. M. (2002)

Einfluss unterschiedlicher Inkubationstemperaturen auf Catecholamin- und Cortisolkonzentrationen sowie Stoffwechselparameter im Blutplasma von Hühnerembryonen (*Gallus gallus f. domestica*).

Dissertation, Freie Universität, Berlin.

PORT, J.D., DEBELLIS, C.C., KLEIN, J., PEETERS, G.A., BARRY, W.H., BRISTOW, M.R. (1992)

Pharmacological characterization of chick and frog beta adrenergic receptors in primary cultures of myocardial cells.

J. Pharmacol. Exp. Ther. **262**, 217-224

PRINZINGER, R. (1996)

Betrachtungen um und in das Ei.

In: Tönhardt, H., Lewin, R. (eds.), Investigations of Perinatal Development of Birds.

Berlin: Workgroup "Prenatal Development", Institute of Veterinary Physiology,

137-165

OSTADAL, B., OSTADALOVA, I., DHALLA, N.S. (1999)

Development of cardiac sensitivity to oxygen deficiency: comparative and ontogenetic aspects.

Physiol. Rev. **79**, 635-659

RAHN, H., PAGANELLI, C.V., AR, A. (1974)

The avian egg: air-cell gas tension, metabolism and incubation time.

Respir. Physiol. **22**, 297-309

REITHMANN, C., THOMSCHKE, A., WERDAN, K. (1987)

Endogenous noradrenaline and beta-adrenoceptor regulation in cultured heart cells.

Biomed. Biochem. Acta **46**, S628-633

RENAUD, J.F., SPERELAKIS, N., LE DOUARIN, G. (1978)

Increase of cyclic AMP levels induced by isoproterenol in cultured and non-cultured chick embryonic hearts.

J. Mol. Cell. Cardiol. **10**, 281-286

RICKENBACHER, J., MULLER, E. (1979)

The development of cholinergic ganglia in the chick embryo heart.

Anat. Embryol. (Berl.) **155**, 253-258

ROMANOFF, A. L. (1960)

The Avian Embryo.

The McMillan Company, New York

ROMANOFF, A. L. (1967)

Biochemistry of the Avian Embryo.

Wiley-Interscience, New York

ROMANOFF, A. L. (1972)

Pathogenesis of the avian embryo.

John Wiley & Sons, New York, London, Sydney, Toronto

ROMJIN, C. (1948)

Respiratory movements of chicken during the parafoetal period.

Physiol. Comp. Oecol. **1**, 24-28

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**, 2892-2897

SALOMON, F.-J. (1993)

Lehrbuch der Geflügelanatomie.

Fischer-Verlag, Jena

SCHNORR, B., KRESSIN, M. (2001)

Embryologie der Haustiere, 4.Aufl.,

Enke-Verlag, Stuttgart

SLOTKIN, T.A. (1990)

Endocrine control of synaptic development in the sympathetic nervous system.

In: Gootman, P.M. (Ed.), Developmental neurobiology of the autonomic nervous system.

Humana Press, Clifton, New Jersey, 97-133

SMITH, C.J., PAPPANO, A.J. (1985)

A role for adenylate cyclase in the subsensitivity to isoproterenol during ontogenesis of the embryonic chick ventricle.

J. Pharmacol. Exp. Ther. **235**, 335-343

SPIERS, D.E., BAUMMER, S.C. (1990)

Embryonic development of Japanese quail (*Coturnix coturnix japonica*) as influenced by periodic cold exposure.

Physiol. Zool. **63**, 924-932

St. PETRY, L.B. Jr., van MIEROP, L.H. (1974)

Evidence for presence of adrenergic receptors in the 6-day-old chick embryo.

Am. J. Physiol. **227**, 1406-1410

STEVENS, L. (1996)

Avian biochemistry and molecular biology.

University Press, Cambridge

STEWART, D.E., KIRBY, M.L., ARONSTAM, R.S. (1986)

Regulation of beta-adrenergic receptor density in the non-innervated and denervated embryonic chick heart.

J. Mol. Cell. Cardiol. **18**, 469-475

STOCK, M.K., FRANCISCO, D.L., METCALFE, J. (1983)

Organ growth in chick embryos incubated in 40% or 70% oxygen.

Respir. Physiol. **52**, 1-11

STOCK, M.K., METCALFE, J. (1987)

Modulation of growth and metabolism of the chick embryo by a brief (72-hr) change in oxygen availability.

J. Exp. Zool. Suppl. **1**, 351-356

TAZAWA, H. (1978)

Gas transfer in the chorioallantois.

J. Piiper: Respiratory function in birds, adult and embryonic.

Springer-Verlag, Berlin, 274-291

TAZAWA, H. (1980)

Oxygen and CO₂ exchange and acid-base regulation in the avian embryo.

Am. Zool. **20**, 395-404

TAZAWA, H., MIKAMI, T., YOSHIMOTO, C. (1971)

Respiratory properties of chicken embryonic blood during development.

Respir. Physiol. **13**, 160-170

TAZAWA, H., MOCHIZUKI, M. (1977)

Oxygen analyses of chicken embryo blood.

Respir. Physiol. **31**, 203-215

TAZAWA, H., VISSCHEDIJK, A.H., WITTMANN, J., PIIPER, J. (1983)

Gas exchange, blood gases and acid-base status in the chick before, during and after hatching.

Respir. Physiol. **53**, 173-185

TAZAWA, H., RAHN, H. (1986)

Tolerance of chick embryos to low temperatures in reference to the heart rate.
Comp. Biochem. Physiol. A **85**, 531-534

TAZAWA, H., WAKAYAMA, H., TURNER, J.S., PAGANELLI, C.V. (1988)

Metabolic compensation for gradual cooling in developing chick embryos.
Comp. Biochem. Physiol. A **89**, 271-277

TAZAWA, H., HASHIMOTO, Y., DOI, K. (1992)

Blood pressure and heart rate of chick embryo (*Gallus domesticus*) within the egg:
Response to autonomic drugs.
Comp. Physiol. **11**, 89-96

TAZAWA, H., AKIYAMA, R., PEARSON, J.T. (1996)

Heart Rate of developing avian embryos.
In: Tönhardt, H., Lewin, R. (Hrsg.), 3. Workshop, Prae-, Peri- and postnatal processes
of adaptation. Freie Universität Berlin, Workgroup "Prenatal Development", 1-25

TÖNHARDT, H., VALENTIN, A. (1994)

Zur Entwicklung der sympathikoadrenalen Einheit im Embryo von *Gallus domesticus*.
In: Nichelmann, M., Tschentke, B., Pirow, R. (Hrsg.), 1. Workshop,
Anpassungsprozesse. Humboldt-Universität Berlin, Institut für Biologie, 121-126

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**, 137-142

TUMMONS, J.L., STURKIE, P.D. (1969)

Nervous control of heart rate during excitement in the adult White Leghorn cock.
Am. J. Physiol. **216**, 1437-1440

VINCE, M.A. (1973)

Effects of external stimulation on the onset of lung ventilation and the time of hatching
in the fowl, duck and goose.
Br. Poult. Sci. **14**, 389-401

VINCE, M.A., TOLHURST, B.E. (1975)

The establishment of lung ventilation in the avian embryo: the rate at which lungs become aerated.

Comp. Biochem. Physiol. A **52**, 331-337

VISSCHEDIJK, A. H. (1962)

Praenatale gaswisseling bij de kip.

Proefschrift, Rijksuniversiteit Utrecht

VISSCHEIDIJK, A.H.J. (1968)

The air space and embryonic respiration.

Br. Poult. Sci. **9**, 173-184

VLECK, C.M., VLECK D., HOYT, D.F. (1980)

Patterns of metabolism and growth in avian embryos.

Am. Zool. **20**, 405-416

WANGENSTEEN, O.D. (1972)

Gas exchange by a bird's embryo.

Respir. Physiol. **14**, 64-74

WANGENSTEEN, O.D., RAHN, H. (1970-1971)

Respiratory gas exchange by the avian embryo.

Respir. Physiol. **11**, 31-45

WARBANOW, W. (1970)

Morphologic and functional studies of the hypothermia-induced hypertrophy of the embryonic chick heart.

Acta Biol. Med. Ger. **25**, 281-293

WASSERMANN, G.F., BERNARD, E.A. (1971)

The influence of corticoids on the phenylethanolamine-N-methyl transferase activity in the adrenal glands of *Gallus domesticus*.

Gen. Comp. Endocrinol. **17**, 83-93

WEICKER, H., STROBEL, G. (1994)

Sportmedizin.

Fischer-Verlag, Stuttgart, Jena, New York

WHITE, P.T. (1974)

Experimental studies on the circulatory system of the late chick embryo.

J. Exp. Biol. **61**, 571-592

WISE, P.M., FRYE, B.E. (1973)

Functional development of the hypothalamo-hypophyseal-adrenal cortex axis in the chick embryo (*Gallus domesticus*).

J. Exp. Zool. **185**, 277-292

WITTMANN, J., PRECHTL, J. (1991)

Respiratory function of catecholamines during the late period of avian development.

Respir. Physiol. **83**, 375-386

WOODS, J.E., DE VRIES, G.W., THOMMES, R.C. (1971)

Ontogenesis of the pituitary-adrenal axis in the chick embryo.

Gen. Comp. Endocrinol. **17**, 407-415

YARDEN, Y., RODRIGUEZ, H., WONG, S.K.F. (1985)

The avian beta-adrenergic-receptor -primary structure and membrane topology.

Proc. Natl. Acad. Sci. USA. **83**, 6795-6799