

11 Literaturverzeichnis

- **Abel EL, Greizerstein HB.** Ethanol-induced prenatal growth deficiency: changes in fetal body composition. *J Pharmacol Exp Ther.* 1979 Dec; 211 (3): 668-71
- **Andrews JE, Ebron-McCoy M, Zucker RM, Elstein KH, Rogers JM.** In vitro/in vivo comparison of yolk-sac function and embryo development. *Toxicol.Vitro* 1992; ,6, 1: 1-6
- **Baltz JM, Biggers JD.** Oxygen transport to embryos in microdrop cultures. *Mol Reprod Dev* 1991; 28: 351-355
- **Baltz JM.** Intracellular pH regulation in early embryo. *Bioessays* 1993; 15: 523-530
- **Brown NA, Goulding EH, Fabro S.** Ethanol embryotoxicity: Direct effects on mammalian embryos in vitro. *Science.* 1979 Nov 2; 206(4418): 573-5
- **Chen EY, Fujinaga M, Giaccia AJ.** Hypoxic microenvironment within an embryo induces apoptosis and is essential for proper morphological development. *Teratology* 1999; 60: 215-225
- **Clode AM, Pratten MK, Beck F.** A stage-dependent effect of ethanol on 9,5-day rat embryos grown in culture and the role played by the concomitant rise in osmolality. *Teratology.* 1987 a Jun; 35(3): 395-403
- **Clode AM, Pratten Mk, Beck F.** The effect of ethanol on the growth of rat embryos: the role of stage dependency and hyperosmolality. *Arch Toxicol Suppl.* 1987 b;11: 163-167
- **Cockroft DL.** Development in culture of the rat fetuses explanted at 12,5 and 13,5 days of gestation. *J.Embryol.exp.Morph.* 1973; 29(2): 473-483
- **Cockroft DL.** A comparative and historical review of culture methods for vertebrates. *Int.J. Dev.Biol.* 1997; 41: 127-137
- **Cohen J.** Statistical power analysis for the behavioral sciences. L.Erlbaum Associates, Hillsdale, New Jersey, 1988
- **Deuchar EM.** Regeneration of amputated limb-buds in early rat embryos. *J.Embryol. exp. Morph.* 1976; 35(2): 345-354
- **Edwards LJ, Williams DA, Gardner DK.** Intracellular pH of the mouse preimplantation embryo: amino acids act as buffers of intracellular pH. *Hum Reprod.* 1998 Dec;13(12): 3441-3448

- **Ellington SKL.** In vitro analysis of glucose metabolism and embryonic growth in post-implantation rat embryos. *Development* 1987; 100: 431-439
- **Eto K, Takakubo F.** Improved development of rat embryos in culture during the period of craniofacial morphogenesis. *J. of Craniofacial Genetics and Developmental Biology* 1985 a; 3: 351-355
- **Eto K, Takakubo F.** The role of the yolk sac in craniofacial development of cultured rat embryos. *J. of Craniofacial Genetics and Developmental Biology* 1985 b; 5: 357-361
- **Fantel AG.** Culture of whole rodent embryos in teratogen screening. *Teratogenesis* 1982; *Carcinogenesis and Mutagenesis*; 2: 231-242
- **Fell HB, Robinson R.** The growth, development and phosphatase activity of embryonic avian femora and limb buds cultivated in vitro. *Biochem.J.* 1929; 23: 767-784
- **Fernandez K, Caul WF, Boyd JE, Henderson GI, Michaelis RC.** Malformations and growth of rat fetuses exposed to brief periods of alcohol in utero. *Teratog Carcinog Mutagen.* 1983; 3(6): 457-460
- **Flick B.** Improvement in standardization of the Whole embryo culture (WEC): importance of a more precise stating. *Archive of pharmacology supplement to volume* 2000; (3) 361(4)
- **Franke H,** Die Wirkung einer Unterbrechung der Dottersackzirkulation auf die Ultrastruktur des Dottersacks und die Entwicklung des Fetus bei der Ratte. *Acta Anat.* 1979; 103: 200-211
- **Freeman SJ.** The nutritional function of the visceral yolk sac and its susceptibility to modification by teratogens during organogenesis in the rat: A quantitative in vitro study. *Doktorarbeit* 1981 a; University of Keele (1981)
- **Freeman SJ, Beck F, Lloyd JB.** The role of visceral yolk sac in mediating protein utilization by rat embryos cultured in vitro. *J.Embryol.exp.Morph.* 1981 b; 66: 223-234
- **Fujinaga M, Baden JM.** A new method for explanting early postimplantation rat embryos for culture. *Teratology* 1991; 43: 95-100
- **Giavini E, Broccia ML, Prati M, Bellomo D, Menegola E.** Effects of ethanol and acet-aldehyde on rat embryos developing in vitro. *In vitro Cell Dev Biol.* 1992 Mar; 28A(3 Pt 1): 205-210

- **Gunawardana SC.** Intracellular pH plays a critical role in glucose-induced time dependend potentiation of insulin release in rat inlets. *Diabetes* 2002; 51: 105-113
- **Gupta M, Gulamhusein AP, Beck F.** Morphometric analysis of the visceral yolk sac endo-derm in the rat in vivo an in vitro. *J.Reprod.Fert.* 1982; 65: 239-245
- **Hanitzsch R.,** The influence of HEPES on light response of rabbit horizontal cells. *Vision Res.* 2002; 41: 2165-2172
- **Hare WA.,** Effects of bicarbonate versus HEPES buffering on measured properties of neurons in the salamander retina. *Vis Neurosci* 1998; 15: 263-271
- **Henderson GI, Schenker S.** The effect of maternal alcohol consumption on the viability and visceral development of the newborn rat. *Res Commun Chem Pathol Pharmacol.* 1977 Jan; 16(1): 15-32
- **Henderson GI, Hoyumpa AM Jr, McClain C, Schenker S.** The effect of chronic and acute alcohol administration on fetal development in the rat. *Alcohol Clin Exp Res.* 1979 Apr;3(2): 99-106
- **Henderson GI, Hoyumpa AM Jr, Rothschild MA, Schenker S.** Effect of ethanol and ethanol-induced hypothermia on protein synthesis in pregnant and fetal rats. *Alcohol Clin Exp Res.* 1980 Apr; 4(2): 165-177
- **Herken R.** Differentiation of embryonic tissues in „Whole-Embryo-Culture“ as compared to the development in vivo. *Culture Techniques*, 19. 1981
- **Jojovic M, Wolg F, Mangold U.** Epidermal growth factor, vascular endothelial growth factor and progesterone promote placental development in rat „Whole-Embryo-Culture“. *Anat Embryol (berl)* 1998; 198: 133-139
- **Julien R.M.,** Drogen und Psychopharmaka, Spektrum Akademischer Verlag GmbH, Heidelberg/Berlin/Oxford, 1997
- **Kao J, Brown NA, Schmid B, Goulding EH, Fabro S.** Teratogenicity of valproic acid: In vivo and in vitro investigations. *Teratogen. Carcinogen. Mutagen.* 1981; 1: 367-382
- **Klein NW, Plenefisch JD, Frederickson WT, Carey SW.** Serum from monkeys with histories of fetal wastage causes abnormalities in cultured rat embryos. *Science* 1982; 215: 66-69
- **Klug S, Lewandowski C. Neubert D.** Modification and standardization of the culture of early postimplantation embryos for toxicological studies. *Arch Toxicol.* 1985; 58: 84-88

- **Klug S.** Bovine serum: an alternative to rat serum as a culture medium for the rat Whole embryo culture. *Toxicology in vitro* 1990; 4(4/5): 598-608
- **Kochhar DM.** The use of in vitro procedures in teratology. *Teratology* 1975; 11: 273-288
- **Kugler P, Miki A.** Study on membrane recycling in the rat visceral yolk sac endoderm using concanavalin-A conjugates. *Histochemistry*. 1985; 83(4): 359-367
- **Lane M, Baltz JM, Bavister BD.** Regulation of intracellular pH in hamster preimplantation embryos by the sodium hydrogen (Na⁺/H⁺) antiporter. *Biol Reprod*. 1998 Dec; 59(6): 1483-1490
- **Lee M, Leichter J.** Effect of litter size on the physical growth and maturation of the offspring of rats given alcohol during gestation. *Growth*. 1980 Dec; 44(4): 327-335
- **Levrant J.** Initial effect of sodium bicarbonat on intracellular pH depends on the extracellular nonbicarbonate buffering capacity. *Crit Care Med* 2001; 29:1003-1039
- **Mahadevan MM.** Growth of mouse embryos in bicarbonate media buffered by carbon dioxide, hepes or phosphate. *In Vitro Fert Embryo Transf* 1986; 3(5): 304-308
- **Mensah-Brown EPK, Pratten MK, Beck F.** A method for studying rat embryonic metabolism by microcannulation of the vitelline circulation. *J.Anat.* 1989; 163: 123-134
- **Miki A, Kugler P.** Comparative enzyme histochemical study on the visceral yolk sac endoderm in the rat in vivo and in vitro. *Histochemistry*. 1984;81(4): 409-415
- **Miki A, Fujimoto E, Ohsaki T, Mizoguti H.** Effects of oxygen concentration on embryonic development in rats: a light and electron microscopic study using whole embryo culture techniques. *Anat Embryol (Berl)* 1988; 178(4):337-343
- **Nakagawa M, Price RL, Chintanawonges C, et al.** Analysis of heart development in cultured rat embryos. *J Mol Cell Cardiol* 1997; 29: 369-379
- **Neubert D.** 14. Übertragbarkeit von Tierversuchen; 14.1: prospective in-vitro-Modelle als Ersatz für Langzeituntersuchungen. *AMI-Berichte (1980)* 1980 a; -Berichte
- **Neubert D.** Zum Aussagewert des Tierversuches. *bga-Berichte* 1980 b; 1: 49-55
- **Neubert D.** Zur Vorhersehbarkeit von toxischen Risiken für den Menschen an Hand von Ergebnissen aus in vivo- und in vitro-Versuchen. *PAP17/Job M – Salzburg* Sept.1985 – 21.11.1985 (1985) 1985; -Salzburg

- **New DA.** Development of explanted rat embryos in circulating medium. *J.Embryol.exp.Morph.* 1967; 17(3): 513-525
- **New DA.** Methods of the culture of postimplantation embryos of rodents. *Methods in mammalian embryology*: 1971; 305-319
- **New DA.** Techniques for assessment of teratologic effects: embryo culture. *Environ Health Perspect.* 1976 Dec; 18: 105-110
- **New DA.** The culture of postimplantation embryos. *Hum.Reprod.* 1991; 6(1): 58-63
- **New DA.** Technique as the basis of experiment in developmental biology, An interview with Denis A.T. New. Interview by Juan Arechaga. *Int J Dev Biol.* 1997 Apr;41(2): 139-152
- **New DA, Coppola PT.** Development of explanted rat fetuses in hyperbaric oxygen. *Teratology.* 1970 May;3(2): 153-161
- **New DAT, Coppola PT, Terry S.** Culture of explanted rat embryos in rotating tubes. *J.Reprod. Fert.* 1973; 35: 135-138
- **New DAT, Coppola PT, Cockroft DL.** Comparison of growth in vitro and in vivo of post-implantation rat embryos. *J.Embryol.exp.Morph.* 1976; 36(1): 133-144
- **New DAT, Cockroft DL.** A rotating bottle culture method with continuous replacement of the gas phase. *Experientia* 1978; 138-140
- **Piersma AH, Bode W, Verhoef A, Olling M.** Teratogenicity of a single oral dose of retinyl palmitate in the rat, and the role of dietary vitamin A status. *Pharmacol Toxicol.* 1996 Sept;79(3): 131-135
- **Pitt JA, Carney EW.** Evaluation of various toxicants in rabbit whole embryo culture using a new morphologically based evaluation system. *Teratology* 1999; 59: 102-109
- **Priscott PK, Yeoh GCT, Oliver LT.** The culture of 12- and 13 day rat embryos using continuous and noncontinuous gassing of rotating bottles. *The journal of Experimental Zoology* 1984; 230: 247-253
- **Reichen J.**,Alkohol und die Leber, Institut für klinische Pharmakologie, Universität Bern, 2002)
- **Robkin MA, Shepard TH, Tanimura T.** A new in vitro culture technique for rat embryos. *Teratology* 1974 a; 9: 367-376
- **Robkin MA, Shepard TH, Baum D.** Autonomic drug effects on the heart rat of early rat embryos. *Teratology* 1974 b; 9: 34-44

- **Sadler TW, Horton J, Warner CW.** Whole embryo culture: a screening technique for teratogens. *Teratogenesis 1982; Carcinogenesis and Mutagenesis*, 2: 243-253
- **Samson HH, Grant KA.** Ethanol-induced microcephaly in neonatal rats: relation to dose. *Alcohol Clin Exp Res.* 1984 Mar-Apr; 8(2): 201-203
- **Sandor S, Fazakas-Todea I, Checiu M.** The effect of ethanol upon early development in mice and rats. II. In vitro effect upon early postimplantation rat embryos. *Morphol Embryol (Bucur).* 1980 Oct-Dec; 26(4): 315-320
- **Sanyal MK, Wiebke WA.** Oxygen requirement for in vitro and associated changes in components of culture medium. *J.Embryol.exp.Morph.* 1980; 58: 1-12
- **Saxen L, Karkinen-Jääskeläinen M, Saxen I.** Organ culture in teratology. *Curr.Top.Pathol.* 1976; developmental biology and pathology 1976; 123-143
- **Shapiro PS.** Oxygen induced changes in protein synthesis and cell proliferation in culture lung slice. *Am J.Physiol.* 1994; 267: 720-727
- **Shepard TH, Tanimura T, Robkin MA.** In vitro study of rat embryos. Effects of decreased oxygen on embryonic heart rate. *Teratology* 1969; 2: 107-110
- **Shepard TH, Tanimura T, Robkin MA.** Energy metabolism in early mammalian embryos. *Developmental Biology Supplement* 1970; 4: 42-58
- **Spielmann H.** The respiratory capacity of postimplantation rat embryos in vitro. *Generic*; 1-1-1970
- **Spielmann H, Lücke I.** Problems connected with the measurement of the respiratory rate of whole rat embryos in vitro. *Naunyn Schmiedebergs Arch Pharmacol* 1971; 270: 10-17
- **Spielmann H, Reinhardt C.** [OECD is accepting test guidelines for validated in vitro toxicity tests in 1996]. *ALTEX* 1996; 13: 167-174
- **Tamarin A, Jones KW.** A circulation medium system permitting manipulation during culture of postimplantation embryos. *Acta Embryol. et Morphol. Experimentalis* 1968; 10: 288-301
- **Tarlatzis BC, Sanyal MK, Biggers WJ, Naftolin F.** Continuous culture of the postimplantation rat conceptus. *BiolReprod.* 1984; 31: 415-426
- **Webster WS, Brown W, Pd, Ritchie HE.** A review of the contribution of whole embryo culture to the determination of hazard and risk in teratogenicity testing. *Int.J.Dev.Biol.* 1997; 41(2): 329-335
- **Wilson JG.** Review of in vitro systems with potential for use in teratogenicity screening. *J of Environmental Pathology and Toxicology* 1978; 2: 149-167