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Abramczuk, J. W., "The effects of lanthanum chloride on pregnancy in mice and on preimplantation mouse embryo in vitro," Toxicol., 34, 315-320, 1985.

Armstrong, D. T., A. P. Pfitzner, G. M. Warnes, and R. F. Seemark, "Superovulation treatments and embryo transfer in Angora goats," J. Reprod. Fert., 67, 403-410, 1983.

Austin, C. R., The Mammalian Egg, Thomas, Springfield, Illinois, 1961.

Bae, I. H., and R. H. Foote, "Carbohydrate and amino acid requirements and ammonia production of rabbit follicular oocytes matured in vitro," Exp. Cell. Res., 91, 113-118, 1975.

\_\_\_\_\_, "Maturation of rabbit follicular oocytes in a defined medium of varied osmolality," J. Reprod. Fert., 39, 11-13, 1980.

Balandau, R., L. Jensen, and R. Rummery, "Determination of the pH values of the reproductive tract fluids of the rat during heat," Fertil. Steril., 9, 207-214, 1958.

Barr R. D., D. Rotter, and M. Koekebakker, "Human granulopoiesis in vitro : An Advantage in the use of Iscove's modified Dulbecco's medium," Blut, 48, 45-48, 1984.

Bavister, B. D., "Environmental factors important for in vitro fertilization in the hamster," J. Reprod. Fert., 18, 544-545 (Abstract), 1969.

\_\_\_\_\_, "Substitution of a synthetic polymer for protein in a mammalian gamete culture system," J. Exp. Zool., 217, 45-51, 1981.

Bavister, B. D., M. L. Leibfried, and G. Lieberman, "Development of preimplantation embryos of the golden hamster in a defined culture medium," Biol. Reprod., 28, 235-247, 1983.

Beatty, R. A., "Transplantation of mouse eggs," Nature Lond., 168, 995-103, 1951.

Betteridge, K. J., "Embryo transfer in farm animals," A review of techniques and applications (Monograph 16), pp. 47-92, Canada Department of Agriculture, Ottawa, 1977.

\_\_\_\_\_, "An historical look at embryo transfer," J. Reprod. Fert., 62, 1-13, 1981.

Biggers, J. D., "Fertilization and blastocyst formation," In : Animal Models for Research on Contraception and Fertility (Alexander, N. J., ed.) pp. 223-252, Harper and Row, New York, 1979.

\_\_\_\_\_, "In vitro fertilization and embryo transfer in human beings," New Engl. J. Med., 304, 336-342, 1981.

Biggers, J. D., B. D. Moore, and D. G. Whittingham, "Development of mouse embryos in vivo after cultivation from 2-cell ova to blastocyst in vitro," Nature, 206, 734-735, 1965.

Biggers, J. D., D. G. Whittingham, and R. P. Donahue, "The pattern of energy metabolism in mouse oocyte and zygote," Proc. Natl. Acad. Sci. U.S.A., 58, 560-567, 1967.

Binkerd, P. E., and G. B. Anderson, "Transfer of cultured rabbit embryos," Gamete Res., 2, 65-73, 1979.

Blandau R. J., W. C. Young, and G. W. Corner, Sex and internal secretions (3rd ed.) vol. 2, pp. 797-882, Williams & Wikins, Baltimore, 1961.

- Boone, W. R., J. F. Dickey, L. J. Luszcz, J. R. Dantzler, and J. R. Hill, "Culture of ovine and bovine ova," J. Anim. Sci., 47, 908-913, 1978.
- Bowman, P., and A. McLaren, "Cleavage rate of mouse embryos in vivo and in vitro," J. Embryol. Exp. Morphol., 24, 203-207, 1970 a.  
\_\_\_\_\_, "Viability and growth of mouse embryos after in vitro culture and fusion," J. Embryol. Exp. Morphol., 23, 693-704, 1970 b.
- Bowen, R. A., J. F. Haster, and G. E. Seidel, "In vitro development of bovine embryos in chemically defined media," Proc. 88th Annu. Res. Conf., Colorado State University, Fort Collins, Abstr. 171, 1975.
- Brackett, B. G., "In vitro culture of the zygote and embryo," In : Fertilization and Embryonic Development in Vitro. (Mastroianni, L., and J. D. Biggers, eds.) pp. 61-79, Plenum Press, New York, 1981.
- Brackett, B. G., Y. K. Oh, J. F. Evans, and W. J. Dorawick, "Fertilization and early development of cow ova," Biol. Reprod., 23, 189-205, 1980.
- Brinster, R. L., "A method for in vitro cultivation of mouse ova from two-cell to blastocysts," Exp. Cell. Res., 32, 205-208, 1963.  
\_\_\_\_\_, "Studies on the development of mouse embryos in vitro. I. The effect of osmolarity and hydrogen ion concentration," J. Exp. Zool., 158, 49-58, 1965 a.  
\_\_\_\_\_, "Studies on the development of mouse embryos in vitro. II. The effect of energy source," J. Exp. Zool., 158, 59-68, 1965 b.

- \_\_\_\_\_, "Studies on the development of mouse embryos in vitro. III. The effect of fixed nitrogen source," J. Exp. Zool. 158, 96-78, 1965 c.
- \_\_\_\_\_, "Carbon dioxide production from glucose by the preimplantation mouse embryo," Exp. Cell. Res., 47, 271-277, 1967 a.
- \_\_\_\_\_, "Carbon dioxide production from lactate and pyruvate by the preimplantation mouse embryo," Exp. Cell. Res., 47, 634-637, 1967 b.
- \_\_\_\_\_, "Carbon dioxide production from glucose by the preimplantation rabbit embryo," Exp. Cell. Res., 51, 330-334, 1968 a.
- \_\_\_\_\_, "Hexokinase activity in the preimplantation mouse embryo," Enzymologia, 34, 304-308, 1968 b.
- \_\_\_\_\_, "Effect of glutathione on the development of two-cell mouse embryos in vitro," J. Reprod. Fert., 17, 521-525, 1968 c.
- \_\_\_\_\_, "Culture of two-cell rabbit embryos to morulae," J. Reprod. Fert., 21, 17-22, 1970.
- \_\_\_\_\_, "Uptake and incorporation of amino acids by the preimplantation mouse embryo," J. Reprod. Fert., 27, 329-338, 1971.
- \_\_\_\_\_, "Cultivation of the mammalian embryo." In: Growth. Nutrition, and Metabolism of Cells in Culture (Rothblat, G., and A. Crisostalo, eds.) vol. 2, pp. 251-286, Academic Press, New York, 1972.
- Brinster, R. L., and D. E. Troike, "Requirements for blastocyst development in vitro," J. Anim. Sci., 49, 26-34, 1979.
- Caro, C. M., and A. Trounson, "The effect of protein on preimplantation mouse embryos development in vitro," J. IVF. ET., 1 (3), 183-

187, 1984.

Chang, M. C., "The maturation of rabbit oocytes in culture and their maturation, activation, fertilization and subsequent development in the fallopian tubes," J. Exp. Zool., 128, 379-405, 1955.

Cholewa, J. A. and W. K. Whitten, "Development of 2-cell mouse embryos in the absence of a fix nitrogen source," J. Reprod. Fert., 22, 553-555, 1970.

Cockcroft, D. L., "Abnormalities induced in cultured rat embryos by hyperglycaemia," Br. J. Exp. Pathol., 65 (5), 625-636, 1984.

Cole, H. H., "Superfecundity in rats treated with mare gonadotrophic hormone," Am. J. Physiol., 119, 704-719, 1937.

Crosignani, P. G., "In vitro fertilization and embryo transfer," In : Serono Clinical Colloquia on Reproduction (no. 4 ed.), pp. 1-92, Academic Press, New York, 1983.

Cross, P. C. and R. L. Brinster, "In vitro development of mouse oocytes", Biol. Reprod., 3, 298-307, 1970.

Davis, D. L., and B. N. Day, "Cleavage and blastocyst formation by pig eggs in vitro," J. Anim. Sci., 46, 1043-1053, 1978.

Dickmann, Z. and S. K. Dey, "Steroidogenesis in the preimplantation rat embryo and its possible influence on morula blastocyst transformation and implantation," J. Reprod. Fert., 37, 91-93, 1974.

Ducibella, T. and E. Anderson, "Cell changes and membrane changes in the eight cell mouse mebryos : Prerequisites for morphogenesis of the blastocyst," Devel. Biol., 47, 45-58, 1975.

Edwards, R. G., and C. R. Austin, "Induction of oestrus and ovulation in adult rats," J. Endocrin., 18, 7-13, 1959.

Fekete, E., and C. C. Little, "Observations on the mammary tumor incidence of mice born from transferred ova," Cancer Res., 2, 525-530, 1942.

Folstad L., J. P. Bennett, and R. I. Dorfman, "The in vitro culture of rat ova," J. Reprod. Fert., 18, 145-146, 1969.

Fridhandler, L., "Glucose metabolism in rabbit ova, morulae, and blastocysts," Fed. Proc., Fed. Amer. Soc. Exp. Biol., 18, 48, 1959 (abstract.)

\_\_\_\_\_, "Pathways of glucose metabolism in fertilized rabbit ova at various preimplantation stages," Exp. Cell. Res., 22, 303-316, 1961.

Gianaroli, L., R. Seracchioli, V. Montacuti, A. P. Ferraretti, L. Bianchi, and D. Razzarni, "Coltura in vitro di embrioni di topo," Boll. Soc. It. Biol., 19 (5), 677-683, 1985.

Giavini, E., L. Bonanomi, and F. Ornaghi, "Developmental toxicity during the preimplantation period: Embryotoxicity and clastogenic effects of chlorambucil in the rat," Teratog. Carcinog. Mutag., 4, 341-348, 1984.

Graves, C. N., and J. D. Biggers, "Carbon dioxide fixation by mouse embryos prior to implantation," Science, 167, 1506-1508, 1970.

Guilbert, L. J., and N. N. Iscove, "Partial replacement of serum by selenite, transferrin, albumin and lecithin in haemopoietic cell cultures," Nature, 263, 594-595, 1976.

Gwatkin, R. B. L., "Amino acid requirements for attachment and outgrowth of the mouse blastocyst in vitro," J. Cell. Physiol., 68, 335-344, 1966.

- \_\_\_\_\_, Fertilization mechanisms in man and mammals, pp. 1-197,  
Plenum Press, New York & London, 1977.
- Gwatkin, R. B. L., and A. A. Haidri, "Requirements for the maturation  
of hamster oocytes in vitro," Exp. Cell. Res., 76, 1-7, 1973.
- Hahn, J. and U. Schneider, "Embryo transfer in laboratory animals as  
a tool in reproductive research," Exp. Biol. Med., 7, 170-176,  
1982.
- Hall, B. V., "Variations in acidity and oxidation-reduction potentials  
of rodent uterine fluids," Physiol. Zool., 9, 471-497, 1936.
- Ham, R. G., "Albumin replacement by fatty acid in clonal growth of  
mammalian cells," Science, 140, 802-803, 1963 a.
- \_\_\_\_\_, "An improved nutrient solution for diploid Chinese hamster  
and human cell lines," Exp. Cell. Res., 29, 515-526, 1963 b.
- Harlow, G. M., and P. Quinn, "Foetal and placental growth in the mouse  
after preimplantation development in vitro under oxygen con-  
centrations of 5 and 20 %," Aust. J. Biol. Sci., 32, 363-369,  
1979.
- \_\_\_\_\_, "Development of preimplantation mouse embryos in vivo and  
in vitro," Aust. J. Biol. Sci., 35, 187-193, 1983.
- Harrison, R. G., Proc. Soc. Exp. Biol. Med., 4, 140-143, 1907.
- Heape, W., Proc. R. Soc., 48, 457-458, 1890.
- Holland, M. K., and I. L. Pike, "Albumin protection of mouse morulae  
and early blastocysts against the toxic effects of cuprous and  
cupric ions during development in vitro," J. Reprod. Fert., 53,  
335-339, 1978.

Hoppe, P. C., and D. R. Coman, "Reduced survival in utero from transferred mouse blastocysts compared with morulae," Gamete Res., 7, 161-167, 1983.

Horky, D., "Ultrastructural changes in the fertilized rat ovum after the administration of actinomycin D.," Folia Morphol. (Praha.), 30 (3), 234-237, 1982.

Ichikawa, S., T. Shibata, Y. Takehara, H. Tamada, K. Oda, and S. Murao, "Effects of proteinase inhibitors on preimplantation embryos in the rat," J. Reprod. Fert., 73, 385-390, 1985.

Iscove, N. N., and F. Melchers, "Complete replacement of serum by albumin, transferrin, and soybean lipid in cultures of lipopolysaccharide-reactive B lymphocytes," J. Exp. Med., 147, 923-933, 1978.

Ivanenko, T. I., A. Ya. Kurishko, and V. P. Fedotov, "Growth and development of preimplantation rat embryos in vitro. Effect of various hormonal factors," Probl. Endokrinol. (Mosk.), 31 (1), 47-51, 1985 (Eng. Abstr.)

Juurlink, B. H. J., and S. Fedoroff, "Effects of culture milieus on the development of mouse blastocysts in vitro," In Vitro, 13, 790-798, 1977.

Kanagawa, H., K. Bedirian, C. Ringellerg, and P. K. Basrur, "In vitro culture of bovine ova," Eight Annu. Meet. of the society for the study Reprod., Fort collins. Co., 1975 (Abstr. 74).

Kane, M. T., "The effects of pH on culture of one cell rabbit ova to blastocysts in bicarbonate buffered medium," J. Reprod. Fert., 38, 477-480, 1974.

- \_\_\_\_\_, "Culture of mammalian ova," In: Control of Reproduction in the Cow (Martinus, N., ed.), pp.1-101, The Hague, Boston, London, 1978.
- \_\_\_\_\_, "Fatty acids as energy sources for culture of one-cell rabbit ova to viable morulae," Biol. Reprod., 20, 323-332, 1979.
- \_\_\_\_\_, "Variability in different lots of commercial bovine serum albumin affects cell multiplication and hatching of rabbit blastocysts in culture," J. Reprod. Fert., 69, 467-470, 1983.
- \_\_\_\_\_, "A low molecular weight extract of bovine serum albumin stimulates rabbit blastocyst cell division and expansion in vitro," J. Reprod. Fert., 73, 147-150, 1985.
- Kane, M. T., and R. H. Foote, "Culture of two and four-cell rabbit embryos to the expanding blastocyst stage in synthetic media," Proc. Soc., Exp. Biol. Med., 133, 921-925, 1970.
- Kane, M. T., and D. R. Headon, "The role of commercial bovine serum albumin preparation in the culture of one-cell rabbit embryos to blastocysts," J. Reprod. Fert., 60, 469-475, 1980.
- Leibfried, L. G., L. G. Lieberman, and P. Farrell, "Growth of golden hamster preimplantation embryos in culture," Biol. Reprod., 26, 92A, 1982.
- Leung, P. C. S., M. J. Gronow, G. N. Kellow., A. Lopata, A. L. Speirs, J. C. McBain, Y. P. Plessis, and I. Johnston," Serum supplement in human in vitro fertilization and embryo development," Fertil. Steril., 41 (1), 36-39, 1984.
- Lindner, G. M., and R. W. Wright, "Morphological and quantitative aspects of the development of swine embryos in vitro," J. Anim. Sci., 46, 711-718, 1978.

Longo, F. J., "Effects of puromycin and actinomycin D. on fertilized rabbit eggs cultured in vitro," J. Exp. Zool., 203, 223-250, 1978.

Long, J. A., and H. M. Evan, "The oestrous cycle in the rats and its associated phenomena," Mem. Univ. California., 6, 1-148, 1922.

Lopata, A., I. W. Johnston, I. J. Hoult, and A. I. Speirs, "Pregnancy following intrauterine implantation of an embryo obtained by in vitro fertilization of a preovulatory egg." Fertil. Steril., 33 (2), 117-120, 1980.

Marcus, P., "Embryo transfer in prevention of genetic disease," Lancet, 13, 802, 1979.

Marston, J. H., R. Penn, and P. C. Sivelle, "Successful autotransfer of tubal eggs in the rhesus monkey. (*Macaca mulatta.*)," J. Reprod. Fert., 49, 175-176, 1977.

Massip, A., P. Van der Zwalm, F. Puissant, M. Camus, and F. Leroy, "Effects of in vitro fertilization, culture, freezing and transfer on the ability of mouse embryos to implant and survive," J. Reprod. Fert., 71, 199-204, 1984.

McGaughey, R. W., "The maturation of porcine oocytes in minimal defined culture media with varied macromolecular supplements and varied osmolality," Exp. Cell. Res., 109, 25-30, 1977.

McLaren, A., and H. C. Hensleigh, "Culture of mammalian embryos over the implantation period," The early development of mammals. (Balls, M., and A. E. Wild, eds.) pp. 45-60, Cambridge University Press, 1975.

McLeod C., D. W. J. Anderson, and W. Katz, "Preparation of foetal calf serum for use in tissue culture," J. Biol. Stand., 8, 263-270, 1980,

McReynolds, H. D., and R. Hadek, "A comparison of the fine structure of late mouse blastocysts developed in vivo and in vitro," J. Exp. Zool., 182, 95-118, 1972.

Meneses, J. J., and R. Pederson, "Ascites tumor fluid and bovine serum albumin as supplement in presomite mouse embryo culture," J. Exp. Zool., 231, 355-362, 1984.

Mishell, R. I., S. M. Shiigi, R. R. Capwell and K. H. Grabstein, "Sera and the in vitro induction of immune responses: III Adjuvant obtained from gliding bacteria with properties distinct from enteric bacteria polysaccharide," J. of Immun., 119, 679-684, 1977.

Moore, G. E., D. Mount, G. Tara, and N. Schwartz, "Growth of human tumor cells insuspension cultures," Cancer. Res., 23, 1735-1741, 1963.

Moore, N. W., and J. N. Shelton, "Egg transfer in sheep. Effect of degree of synchronization between donor and recipient, age of egg, and site of transfer on the survival of transferred eggs," J. Reprod. Fert., 7, 145-152, 1964.

Moore, N. W., and G. A. Spry, "The culture of fertilized sheep ova," J. Reprod. Fert., 28, 139, 1972 (Abstr.).

Moskowitz, M., D. M. Schenck, and G. Amborski, "Protective effect of albumin on the growth of mammalian an cells," Fed. Proc., 22, 383, 1963.

Naglee, D. L., R. R. Maurer, and R. H. Foote, "Effect of osmolarity on in vitro development of rabbit embryos in chemically defined medium," Exp. Cell. Res., 58, 331-333, 1969.

Nakagata, N., and Y. Toyoda, "Normal young after transfer of frozen-thawed 2-cell mouse embryos obtained by fertilization in vitro," Jap. J. Zootech. Sci., 51, 740-744, 1980.

New, D. A. T., P. T. Coppola, and D. L. Cockcroft. "Improved development of head-fold rat embryos in culture resulting from low oxygen and modification of the culture system," J. Reprod. Fert., 48, 219-222, 1976.

Newcomb, R., W. B. Christie, and L. E. A. Rowson, "Birth of calves after in vivo fertilization of oocytes removed from follicles and matured in vitro," Vet. Rec., 102, 461-462, 1978.

Nicholas, J. S., "Development of transplanted rat eggs," Proc. Soc. Exp. Biol. Med., 30, 1111-1113, 1933.

Niwa, K., H. Imai, C. I. Kim, and A. Iritani, "Fertilization in vitro of hamster and mouse eggs in a chemically defined medium," J. Reprod. Fert., 58, 104-114, 1980.

Noyes, R. W., "Fertilization of follicular ova," Fertil. Steril., 3, 1-12, 1952.

Noyes, R. W., and Z. Dickmann, L. L. Doyle, and A. H. Gates, Delayed Implantation. (Endero, A. C., ed.) pp. 197-211, University of Chicago Press, Chicago, 1963.

Peters, D. F., G. B. Anderson, and P. T. Cupps, "Culture and transfer of sheep embryos," J. Anim. Sci., 44, 854-858. 1977.

Quinn, P., and R. G. Wales, "Fixation of carbondioxide by preimplantation mouse embryos in vitro and the activities of enzymes involved in the process," Aust. J. Biol. Sci., 24, 1277-1290, 1971.

\_\_\_\_\_, "The effect of culture in vitro on the levels of adenosine tri-phosphate in preimplantation mouse embryos," J. Reprod. Fert., 32, 231-241, 1973.

Restall, B. J., and R. G. Wales, "The fallopian tube of the sheep. III The chemical composition of the fulid from the fallopian tube," Aust. J. Biol. Sci., 19, 687-698, 1966.

Rizzino, A., and M. I. Sherman, "Development and differentiation of mouse blastocyst in serum free medium," Exp. Cell. Res., 121, 221-233, 1979.

Rizzo, E., C. A. C. Vaz, I. F. Mendes, and A. F. B. Yano, "Study on the growth promoting capacity of calf and fetal bovine serum for animal cells in vitro," Rev. Inst. Med. trop., 26 (2), 97-104, 1984.

Robl, J. M., and D. L. Davis, "Effects of serum on swine morulae and blastocysts in vitro," J. Anim. Sci., 52 (6), 14051-14056, 1981.

Roblero, L., F. Beas, and J. Arrau, "Embryo development under the effects of a new placental protein (UTPH) and its antiserum," Horm. Metab. Res., 13, 124-125, 1981.

Rowlands, Z. W., "The production of ovulation in the immature rat," J. Endocr., 3, 384-391, 1944.

Roy, S. K., J. Sengupta, and S. K. Manchanda, "Rat embryo development in vitro," Acta Endocrinologica, 96, 546-551, 1981.

- Saito, H., T. Berger, D. R. Mishell, and R. P. Marrs, "Effect of variable concentration of serum on mouse embryo development," Fertil. Steril., 41 (3), 460-464, 1984.
- Salomon, D. S., and M. I. Sherman, "Implantation and invasiveness of mouse blastocysts on uterine monolayers," Exp. Cell Res., 90, 261-268, 1975.
- Sandor, Z., M. Checiu, I. Fazakas-todea, and Z. Garban, "The effect of ethanol upon early development in mice and rats. I. In vivo effect upon preimplantation and early postimplantation stages," Morphol. Embryol., 3, 265-274, 1980.
- Sanyal, M. K., and R. K. Meyer, "Effect of estrone on DNA synthesis in preimplantation balstocysts of gonadotropin-treated immature rats," Endocrinology, 86, 976-981, 1970.
- Sanyal, M. K., and F. Naftolin, "In vitro development of the mammalian embryo," J. Exp. Zool., 228, 235-251. 1983.
- Schenk, S. L., "Das Saugerthierei kunstlich befruchtet aus serhalb de des Mutterthieres," Mitt. Embr. Inst. KK. Univ. Wien I., 107, 1880.
- Schneider, U., J. Hahn, and H. Sulzer, "Ersteergebnisse der tiefgefrierkon-servierung von mauseund kaninchene izellen." Dt. tierarztl. Wschr., 81, 470-472, 1974.
- Seidel, G. E. Jr., R. A. Bowen, and M. T. Kane, "In vitro fertilization, culture and transfer of rabbit ova," Fertil. Steril., 27, 862-870, 1976.

- Sengupta, J., A. K. Dey, and Z. Dickmann, "Evidence that embryonic oestrogen is a factor which controls the development of the mouse preimplantation embryo," Steroids, 29, 363-369, 1977.
- Seracchioli, R., L. Gianaroli, V. Montacuti, A. P. Ferraretti, D. Razzani, and S. Pancaldi, "Sincronizzazione dell' ovulazione a raccolta di embrioni nel topo," Boll. Soc. It. Biol., 19 (5), 685-688, 1985.
- Shea, B. F., J. P. A. Latour, K. N. Bedirian, and R. D. Baker, "Maturat-  
tion in vitro and subsequent penetrability of bovine follicular  
oocytes," J. Anim. Sci. 43, 809-815, 1976.
- Shelton, K., and I. Craft, "The successful cryopreservation of in vitro  
fertilized mouse embryos," Cryo. Letters, 2, 305-310, 1982.
- Shirley, B., J. W. E. Wortham, J. Witmyer, and M. C. Mahony, "Effects  
of human serum and plasma on development of mouse embryos in  
culture media," Fertil. Steril., 43 (1), 129-134, 1985.
- Smith, P. E., and E. T. Engle, "Experimental evidence reporting the  
role of anterior pituitary in the development and regulation  
of the genital system," An. J. Anat., 40, 159-217, 1927.
- Snow, M. H. L., "The functional competence of the inner cell mass,"  
In: New approaches to the evaluation of abnormal embryonic  
development (Newbent, D., and M. J. Merder, eds.) pp. 394-407.  
George Thuiine Publishers, Stuttgart, 1975.
- Spiers, A. L., A. Thomson, G. M. Warnes, J. Yovich, D. Saunders and  
C. Chen, "Summary of results," In: Clinical in vitro fertiliza-  
tion. (Wood, C., and A. Trounson, eds.) pp. 157-163, Springer  
Verlas, Berlin, 1984.

Spindle, A. I., "An improved culture medium for mouse blastocysts," In Vitro, 16 (8), 669-674, 1980.

Spindle, A. I., and R. A. Pederson, "Hatching attachment, and out growth of mouse blastocysts in vitro: Fixed nitrogen requirements," J. Exp. Zool., 186, 305-318, 1973.

Steele, C. E., "The effect of vitamin E and synthetic antioxidants on the growth in vitro of explanted rat embryos," J. Reprod. Fert., 18, 115-123, 1974.

Steptoe, P. C., R. G. Edwards, and J. M. Purdy, "Human blastocysts grown in culture," Nature, 229, 132-133, 1971.

Steptoe, P. C., and R. G. Edwards, "Birth after the reimplantation of a human embryo," Lancet, 2, 366. 1978 (Letter.)

Suzuki, S., and R. Iizuka, "In vitro cultivation of early rat embryos," Cytologia, 34, 496-502, 1968.

Tarkowski, A. K., Acta Theriol., 2, 251-267, 1959.

Temin, H. M., R. W. Pierson, and N. C. Dulak, "The role of serum in the control of multiplication of avian and mammalian cells in culture," In: Growth, Nutrition, and Metabolism of cells in Culture. (Rothblat, G. H., and V. J. Cristofalo, eds.) vol. 1, pp. 49-81, Academic Press, New York, 1972.

Tervit, H. R., and L. E. A. Rowson, "Birth of lambs after culture of sheep ova in vitro for up to 6 days," J. Reprod. Fert., 38, 177-179, 1974.

Tervit, H. R., Whittingham, D. G., and L. E. A. Rowson, "Successful culture in vitro of sheep and cattle ova," J. Reprod. Fert., 30, 493-497, 1972.

- Thomson, J. L., "Effects of inhibitor of carbohydrate metabolism on the development of preimplantation mouse embryos," Exp. Cell. Res., 46, 252-262, 1966.
- Trounson, A. O., and N. W. Moore, "Attempts to produce identical offspring in the sheep by mechanical division of the ovum," Aust. J. Biol. Sci., 27, 505-510, 1974.
- Tsunoda, Y., T. Soma, and T. Sugie, "Effect of post-ovulatory age of recipient on survival of frozen-thawed rabbit morulae," J. Reprod. Fert., 65, 483-487, 1982.
- Van Winkle, L. J., and A. L. Campione, "Toxic effects of  $Zn^{++}$  and  $Cu^{++}$  on mouse blastocysts in vitro," Experientia, 38, 354-356, 1982.
- Vishwakarma, P., "The pH and bicarbonate-ion content of the oviduct and uterine fluids," Fertil. Steril., 13, 481-485, 1962.
- Wales, R. G., "Effects of ions on the development of the preimplantation mouse embryo in vitro," Aust. J. Biol. Sci., 23, 421-429, 1970.
- Wales, R. G., P. Quinn, and R. N. Murdoch, "The fixation of carbon dioxide by the 8-cell mouse embryo," J. Reprod. Fert., 20, 541-543, 1969.
- Wales, R. G. and D. G. Whittingham, "Metabolism of specifically labelled pyruvate by mouse embryos during culture from two-cell stage to the blastocyst," Aust. J. Biol. Sci., 23, 877-887, 1970.
- \_\_\_\_\_, "Decomposition of sodium pyruvate in culture media sterilized at  $5^{\circ}C$  and its effects on the development of the preimplantation mouse embryo," J. Reprod. Fert., 24, 126, 1971 (abstr.).

Wallis, C., B. Ver, and J. L. Melnick, "The role of serum and fetuin in the growth of monkeys cells in culture." Exp. Cell. Res., 58, 271-282, 1969.

Walsh, D. A., and Z. H. Christian, "The effect of phenylalanine on cultured rat embryos," Teratog. Carcinog. Mutag., 4 (4), 341-348, 1984.

Warmsby, H., P. Sundstrom, and P. Liedholm, "In vitro fertilization: Problems in culture conditions and embryo transfer," Zbl. Gynakol., 106, 907-910, 1984.

Warwick, B. L., R. O. Berry, and W. R. Horlacher, "Results of mating rams to Angora female goats," Proc. 27th. Ann. Meet. Am. Soc. Anim. Prod., 225-227, 1934.

Whitaker, A. M., and E. M. Smith, "Effect of bacterial toxins in serum on the chromosomes of WI-380," Devel. Biol. Standard., 37, 185-190, 1977.

Whitten, W. K., "Culture of tubal mouse ova," Nature, 117, 96, 1956.  
\_\_\_\_\_, "Nutrient requirements for the culture of preimplantation embryos in vitro," In: Advances in the Biosciences, vol. 6, pp. 105-177, Pergamon Press, New York, 1971.

Whitten, W. K., and J. D. Biggers, "Complete development in vitro of the preimplantation stages of the mouse in a simple chemically defined medium," J. Reprod. Fert., 17, 399-401, 1968.

Whittingham, D. G., "Culture of mouse ova," J. Reprod. Fert. Suppl., 14, 7-21, 1971.

\_\_\_\_\_, "The early development of mammals," The Second Symposium of the British Society for Development Biology. (Balls, M. and

- A. E. Wild, ed.) pp. 1-24, Cambridge University Press, Cambridge, 1975.
- \_\_\_\_\_, "In vitro fertilization, embryo transfer and storage," Br. Med. Bull., 35, 105-111, 1979.
- Whittingham, D. G., and E. Anderson, "Ultrastructural studies of frozen-thawed 8-cell mouse embryos," J. Reprod. Fert., 48, 131-140, 1976.
- Winkle, L. J., and A. L. Campione, "Periimplantation-like growth and development of mouse blastocysts in medium containing horse serum," Experientia, 40, 988-990, 1984.
- Wood, C., R. McMaster, G. Rennie, A. Troumson, and J. Leeton, "Factor influencing pregnancy rates following in vitro fertilization and embryo transfer," Fertil. Steril., 43 (2), 245-250, 1985.
- Wright, R. W., "Successful culture in vitro of swine embryos to the blastocyst stage," J. Anim. Sci., 44, 854-858, 1977.
- Wright, R. W., G. B. Anderson, P. T. Cupps, and M. Drost, "Successful culture in vitro of bovine embryos to the blastocyst stage," Biol. Reprod., 14, 157-162, 1976 a.
- \_\_\_\_\_, "Blastocyst expansion and hatching of bovine ova cultured in vitro," J. Anim. Sci., 43, 170-174, 1976 b.
- Wright, R. W., G. B. Anderson, P. T. Cupps, M. Drost, and G. E. Bradford, "In vitro culture of embryos from adult and prepuberal ewes," J. Anim. Sci., 42, 912-917, 1976 c.
- Wright, R. W. and K. R. Bondioli, "Aspects of in vitro fertilization and embryo culture in domestic animals," J. Anim. Sci., 53 (3), 703-729, 1981.

Yamane, I., O. Murakami, and M. Kato, "Role of bovine albumin in a serum-free suspension cell culture medium, "Proc. Soc. Exp. Biol. Med., 149, 439-442, 1975.

Yodyingyuad, V., Growth of the preimplantation hamster embryos in vivo and in vitro, pp. 1-132, 1982.

Zarrow, M. X., A. L. Caldwell, E. S. E. Hafez, and G. Pincus, "Superovulation in the immature rat as a possible assay for LH and HCG," Endocr., 63, 748-758, 1958.

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