

เอกสารอ้างอิง

- Ackerman, S.B., R.J. Swanson, G.K. Stokes and L.L. Veeck, "Culture of mouse preimplantation embryos as a quality control assay for human in vitro fertilization, "Gamete Research, 9,145-152, 1984.
- Austin, C.R., The Mammalian Egg, Thomas; Springfield, Illinois, 1961.
- Bavister, B.D., "Environmental factors important for in vitro fertilization in the hamster," J. Reprod. Fert., 18, 544-545 (Abstract), 1969.
- Bavister, B.D., "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, 1951.
- Betteridge, K.J., "Embryo transfer in farm animal," A review of techniques and application (Monograph 16), pp. 47-92, Canada Department of Agriculture, Ottawa, 1977.
- Betteridge, K.J., "An historical look at embryo transfer," J. Reprod Fert., 62, 1-13, 1981.
- Biggers, J.D., B.D. Moore and D.G. Whittingham, "Development of mouse embryos in vivo after cultivation from two - cell ova to blastocysts in vitro," Nature, 206, 734-735, 1965.
- Bigger, 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.

- Bishop, D.W., "Metabolic conditions within the oviduct of the rabbit",
Int J Fertil, 2, 11-14, 1957.
- Blandau, R.J., W.C. Young, and G.W. Cornex, "Sex and internal secretions
(3rd ed.) Vol.2, pp. 797-882, Williams and Wilkins, Baltimore,
1961.
- Borland, R.M., S. Hazra, J.D. Biggers, and C.P. Lechene, "The elemental
composition of the environments of the gametes and preimplantation
embryo during the initiation of pregnancy," Biology of Reproduction,
16, 147-157, 1977.
- Borland, R.M., J.D. Biggers, C.P. Lechene and M.L. Taymor, "Elemental
composition of fluid in the human fallopian tube," J. Reprod
Fert., 58, 479-482, 1980.
- Bowman, P., and A. McLaren, "Cleavage rate of mouse embryos in vivo
and in vitro," J. Embryol. Exp. Morphol., 24, 203-207, 1970.
- Brinster, R.L., "A method for in vitro cultivation of mouse ova from two -
cell to blastocysts," Exp. Cell. Res., 32, 205-208, 1963.
- Brinster, R.L., "Studies on the development of mouse embryos in vitro.
I. The effect of osmolarity and hydrogen ion concentration,"
J. Exp. Zool., 158, 49-58, 1965a.
- Brinster, R.L., "Studies on the development of mouse embryos in vitro.
II. The effect of energy source," J. Exp. Zool., 158, 59-68,
1965b.
- Brinster, R.L., "Studies on the development of mouse embryos in vitro.
III. The effect of fixed nitrogen source," J. Exp. Zool. 158,
96-78, 1965c.
- Brinster, R.L., "Studies on the development of mouse embryos in vitro.
IV. Interaction of energy sources," J. Reprod. Fertil., 10,
227-231, 1965d.

- Brinster, R.L., and J.L. Thomson, "Development of eight-cell mouse embryos in vitro," Exp Cell. Res. 42, 308-315, 1966.
- Brinster, R.L., "Uptake and incorporation of amino acids by the preimplantation mouse embryo," J. Reprod. Fert., 27, 329-338, 1971.
- Brinster, R.L., "Cultivation of the mammalian embryo." In : Growth, Nutrition, and Metabolism of Cells in Culture (Rothblat, G., and A. Cristofalo, eds.) vol. 2, pp. 251-268. Academic Press, New York, 1972.
- 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.
- Champlin, A.K., S.J. Kuzia, B.A. Rice, L.E. Mobraaten, "Cell surface characteristics of blastocysts from spontaneously ovulating and gonadotropin - treated mice," Biol. of Reprod, 36, 439-444, 1987.
- 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.
- 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, "Clevage and blastocyst formation by pig eggs in vitro," J. Anim. Sci., 46, 1043-1053, 1978.
- Dandekar, P.V., M.M. Suigley, "Laboratory set up for human in vitro fertilization," Fert Steril, 42, 1-11, 1984.
- 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 shape and membrane changes in the

eight-cell mouse embryo : Prerequisites for morphogenesis of the blastocyst," Dev. Biol., 47, 45-51, 1975.

Edirisinghe, W.R., S.C. Ng., H. Mok, P.C. Wong, and S.S. Ratnam, "Effect of various culture media used in human IVF on the development of 2-cell mouse embryos to post-implantation stages in vitro," 12th World Congress on Fertility and Sterility (abstracts), October 26-31, 946, 1986.

Edwards, R.G., " Test-tube babies," Nature 293, 253-255, 1981.

Edwards, R.G., and Gates, A.H., "Timing of the stages of the maturation divisions, ovulation, fertilization and the first cleavage of eggs of adult mice treated with gonadotrophins," J. Endocr., 18, 292-295, 1959.

Epstein, C.J. and S.A. Smith "Amino acid uptake and protein synthesis in preimplantation mouse embryos," Developmental Biology, 33, 171-184, 1973.

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

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.

Gianaroli, L.R. Seracchioli, A.P. Ferraretti, A. Trounson, C. Flamigni, and Bovicelli," The successful use of human amniotic fluid for mouse embryo culture and human in vitro fertilization, embryo culture, and transfer," Fertil Steril, 46, 907-913, 1986.

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

- Gwatkin, R.B.L., "Amino acid requirements for attachment and out growth of the mouse blastocyst in vitro," J. Cell. Physiol., 68, 335-344, 1966.
- Hahn, J. and U. Schneider, "Embryo transfer in laboratory animals a tool in reproductive research," Exp. Biol. Med., 7, 170-176, 1982.
- Ham, R.G., "Albumin replacement by fatty acid in clonal growth of mammalian cells," Science, 140, 802-803, 1963a.
- Ham, R.G., "An improved nutrient solution for diploid Chinese hamster and human cell lines," Exp. Cell. Res., 29, 515-526, 1963b.
- Hammond, J., Jr, "Recovery and culture of tubal mouse ova," Nature (London), 163, 28-29, 1949.
- Harlow, G.M., and P. Quinn, "Foetal and placental growth in the mouse after preimplantation development in vitro under oxygen concentrations of 5 and 20%," Aust. J. Biol. Sci., 32 363-369, 1979.
- 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 S. Pitts, "Fertilization in vitro and development of mouse ova," Biol. Reprod., 8, 420-426, 1973.
- Iscove, N.N., and F. Melchers, "Complete replacement of serum by albumin, transferrin, and soybean lipid in cultures of lipopoly saccharide - reactive B lymphocytes," J. Exp. Med., 147, 923-933, 1978.
- Ivanenko, T. I., A. Ya. Kurishko, and V. P. Febotov, "Growth and development of preimplantation rat embryos in vitro. Effect of various hormonal factors," Probl. Endokrinol. (Mosk.), 32 (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.
- Kane, M.T., "Energy substrates on culture of single cell rabbit ova to blastocyst", Nature (London), 238, 468-470, 1972.
- Kane, M.T., Culture of mammalian ova, "In : Control of Reproduction in the Cow (Martinus, N., ed.), pp. 1 - 101, The Hague, Boston, London, 1978.
- Kane, M.T., "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.
- Kane, M. T., "A low molecular weight extract of bovine serum albumin stimulates rabbit blastocyst cell division and expansion in vitro," J. Reprod Fert., 73, 147, 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 R.H. Foote, "Factors affecting blastocyst expansion of rabbit zygotes and young embryos in the defined media," Biol. Reprod, 4, 41-44, 1971.
- 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.
- Kasai, K., M. Sugimoto, and Y. Toyoda, "Normal progeny produced by the parents derived from mouse eggs fertilized in vitro," Jap. J. Zootech. Sci, 50, 885-890, 1979.

- 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.
- Lopata, A., I. W. Johnston, I. J. Hault, 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.
- Marrs, R. P., J. M. Vargyas, W. E. Gibbons, H. Saito, and D.R. Mishell, "Successful pregnancies using a modified technique of human in vitro fertilization and embryo transfer," Am. J. Obstet Gynecol., 147, 318-321, 1983.
- Mastroianni, L., W.W. Winternitz, and N.P. Lowi, "The in vitro metabolism of the human endosalpinx," Fertil. Steril., 9, 500-503, 1958.
- 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.
- Maurer, R.R., R.H. Whitener and R.H. Foote, "Relationship of in vivo gamete aging and exogenous hormones to early embryo development in rabbits," Proc. Soc. Exp. Biol. Med., 131, 882-885, 1969.

- McGaughey, R. W., "The maturation of porcine oocytes in minimal defined culture media with varied macromolecular supplements and varied osmolarity," Exp. Cell. Res., 109, 25-30, 1977.
- McLaren, A., and J. D. Biggers. "Successful development and birth of mice cultivated in vitro as early embryo," Nature, 182, 877-880, 1958.
- 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.
- Mintz B., "Synthetic processes and early development in the mammalian egg," J. Exp. Zool., 157, 85-100, 1969.
- Moore, C. 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.
- Mukherjee, A. B., and M. M. Cohen, "Development of normal mice by in vitro fertilization," Nature (London) 228, 472-473, 1970.
- Nakagata, N., and Y. Toyoda, "Normal young after transfer of frozen - thawed 2 - cell mouse embryo obtained by fertilization in vitro," Jap. J. Zootech Sci., 51, 740-744, 1980.
- Nicholas, J. S., "Development of transplanted rat eggs," Proc. Soc. Exp. Biol. Med., 30, 1111-1113, 1933.
- Noyes, R. W., Z. Deckmann, L. L. doyle, and A. H. Gates, "Delayed Implantation. (Endero, A. C., ed.)" pp. 197-211, University of Chicago Press, Chicago, 1963.
- Ogawa, T., and R. P. Marrs, "The effect of protein supplementation on single - cell mouse embryo in vitro," Fertil Steril., 47, 156-160, 1987.

- Ogawa, S., K. Satoh and H. Hashimoto, "In vitro culture of rabbit ova from the single cell to the blastocyst stage," Nature (London), 233, 422-424, 1971.
- Pemble, L.B., and P. L. Kane, "Whole protein uptake and metabolism by mouse blastocyst," J. Reprod Fert., 78, 147-157, 1976.
- Peters, D. F., G. B. Anderson, and P. T. Cupps, "Culture and transfer of sheep embryo," J. Animal Sci., 44, 854-858, 1977.
- Quinn, P., and D. G. Whittingham, "Effect of fatty acids on Fertilization and Development of mouse embryos in vitro," J. Androl., 3, 440-444, 1982.
- Quinn, P., J. F. Kerin and G.M. Warnes, "Improved pregnancy rate in human in vitro fertilization with the use of a medium based on the composition of human tubal fluid," Fertil Steril., 44, 493-498, 1985.
- Quinn, P., G. M. Warnes, J. F. Kerin, and C. Kirby, "Culture factors in relation to the success of human in vitro fertilization and embryo transfer," Fertil Steril., 41, 202-209, 1984.
- Restall, B. J., and R. G. Wales, "The fallopian tube of the sheep. III The chemical composition of the fluid from the fallopian tube," Aust. J. Bio. 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.
- 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.

- 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.
- Sanyal, M.K., and F. Naftolin, "In vitro development of the mammalian embryo," J. of Experimental Zoology., 228, 235-215, 1983.
- Saengupta, 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. Pancald, "Sincronizzainoe dell" ovulazione a raccolta di embryoni nel topo," Boll. Sox., It. Biol., 19 (5), 685-688, 1985.
- Shea, B.F., J. P. A. Latour, K. N. Bedirian, and R. D. Baker, "Matuaration in vitro and subsequent penetrability of bovine follicular oocytes," J. Anim. Sci., 43, 809-815, 1976.
- Shelton, K., and I. Carft, " 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.
- 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 Thuine Pubishers, Stuttgart, 1975.
- 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, 306-318, 1973.
- Stephoe, P. C., R. G. Edwards, and J. M. Purdy, "Human blastocysts grow in culture," Nature, 229, 132-133, 1971.
- 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., Whittingham, D. G., and L. E. A. Rowson, "Successful culture in vitro of sheep and cattle ova," J. Reprod. Fert., 30, 493-497, 1972.
- 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.
- Van Winkle, L. J., and A. L. Campione, "Toxic effects of Zn^{++} and Cu^{++} on mouse blastocysts in vitro," Experientia, 38, 354-365, 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, 421-424, 1970.
- Wales, R. G., "The uterus of the ewe. II Chemical analysis of uterine fluid collected by cannulation" Aust. J. Biol. Sci., 26, 947-955, 1973.

- Wales, R. G., "Maturation at the mammalian embryo : Biochemical Aspects," Biol. of Reprod, 12, 66-81, 1975.
- 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.
- Wallis, C., B. Ver, and J. L. Melnick, " The role of serum and fetuin in the growth of monkey cells in culture," Exp. Cell. Res., 58, 271-282, 1969.
- 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.
- Whitten, W. K., "Culture of tubal mouse ova," Nature, 117, 96, 1957.
- Whitten, W.K., "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.
- Whittingham, D. G., " The early development of mammals," The Record Symposium of the British Society for Development Biology. (Balls, M. A. E. Wild, ed.) 1-24, Cambridge University Press, Cambridge, 1975.
- Whittingham, D. G., "In vitro fertilization embryo transfer and storage," Br. Med Bull., 35, 105-111, 1979.

Whittingham, D.G., and B. D. Bavister, "Development of hamster eggs fertilized in vitro or in vivo," J. Reprod. Fert., 38, 489-492, 1974.

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.

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

เกศรินทร์ แสงจันทร์, การเพาะเลี้ยงตัวอ่อนของหนูขาวพันธุ์วีสตาร์ในหลอดทดลอง, วิทยานิพนธ์ปริญญาวิทยาศาสตรมหาบัณฑิต สหสาขาวิชาสัตววิทยา บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย, 2530.

ประวัติผู้เขียน



ชื่อ	นางสาวกนกวรรณ มารต้อม
วัน เดือน ปีเกิด	11 มิถุนายน 2503
ภูมิลำเนา	จังหวัดพิษณุโลก
การศึกษา	ประกาศนียบัตรพยาบาลศาสตร์ และผดุงครรภ์ชั้นสูง วิทยาลัยพยาบาลพุทธชินราช จ. พิษณุโลก
การทำงาน	อาจารย์ประจำแผนกการพยาบาลกุมารเวช วิทยาลัยพยาบาลพุทธชินราช จ. พิษณุโลก