

## รายการอ้างอิง

### ภาษาไทย

- ประเสริฐ ศรีไพโรจน์. 2530. วิธีร่วมเมแทบอลิซึม ซีวเคมี มหาสารคาม โรงพิมพ์  
ปริดาออฟเซทการพิมพ์.
- วิทยา ยศยิ่งยวด. 2530. การปฏิสนธิในหลอดทดลองและการย้ายฝากตัวอ่อน  
ของสัตว์เลี้ยงลูกด้วยนม. ในการปฏิสนธิในหลอดแก้วและการย้ายฝาก  
ตัวอ่อน กรุงเทพฯ โรงพิมพ์จุฬาลงกรณ์มหาวิทยาลัย.
- อภิสิทธิ์รา ชมิตท์พ. 2537. เมแทบอลิซึมของลิพิด. ซีวเคมี กรุงเทพฯ โรงพิมพ์  
สหมิตรออฟเซท.

### ภาษาอังกฤษ

- Abramczuk, J., D. Solter, and H. Koprowski. 1977. The  
beneficial effect of EDTA on development of mouse  
one-cell embryos in chemically defined medium.  
Devl. Biol. 61 : 378-383.
- Ashbrook, J.D., A.A.Spector., E.C.Santos., and J.E.Fletcher.  
1975. Long chain fatty acid binding to human  
plasma albumin. J.Biol. Chem. 250: 2333-2338.
- Auerbach, S., and R.L. Brinster. 1968. Effect of oxygen  
concentration on the development of two-cell mouse  
embryos. Nature, Lond. 217 : 465.
- Bailey, J.M., and L.M.Dunbar. 1973. Essential fatty acid  
requirements of cell in tissue culture : A review.  
Exp. Mol. Path. 18: 142-161.

- Barnes, D., and G. Sato. 1980. Serum-free cell culture : a unifying approach. Cell. 22 : 649-655.
- Beier, H.M. 1974. Oviducal and uterine fluids. J.Reprod.Fert. 37 : 221-237.
- Benadiva, C.A., B.K.Brown, T.G.Maguire, L.Mastroianni, and G.L. Flickinger. 1989. Bovine Serum albumin (BSA) can replace patient serum as a protein source in an in vitro fertilization (IVF) program. J. In Vitro Fert. Embryo.Transfer. 6 : 164-167.
- Biggers, J.D., 1963. A method for in vitro cultivation of mouse ova from two-cell to blastocyst. Exp. Cell. Res. 32 : 205-208.
- Biggers, J.D., D.G.Whittingham, and R.P.Donahue. 1967. The pattern of energy metabolism in the mouse oocyte and zygote. Zoology. 58 : 560-567.
- Brinster, R.L. 1963. A Method for in vitro cultivation of mouse ova from two-cell to blastocysts. Exp. Cell Res. 32 : 250-208.
- \_\_\_\_\_. 1965. Studies on the development of mouse embryos in vitro. J.Reprod.Fert. 10 : 227-240.
- \_\_\_\_\_. 1967. Protein content of the mouse embryo during the first five days of development. J.Reprod Fert. 13 : 413-417.
- \_\_\_\_\_. 1969. Incorporation of carbon from glucose and pyruvate into the preimplantation mouse embryo. Exp. Cell. Res. 58 : 153-158.

- \_\_\_\_\_. 1971. Uptake and incorporation of amino acids by the preimplantation mouse embryo. J.Reprod. Fert. 27 : 329-338.
- \_\_\_\_\_. 1972., Cultivation of the mammalian embryo. In : Growth, Nutrition, and Metabolism of cells in culture. Vol II. H. Tothblat and V.J. Cristofalo (Eds) Academic press pp. 251-286.
- Brinster, R.L., and D.E. Troike. 1979. Requirements for blastocyst development in vitro. J. Anim. Sci. 49 : 26-34.
- Brinster, R.L., and J.L.Thomson. 1966. Development of eight-cell mouse embryos in vitro. Exp. Cell. Res. 42 :308-315.
- Carney, E.W., and B.D.Bavister. 1987. Stimulating and inhibitory Effects of amino acids on the development of hamster eight-cell embryos in Vitro. J. In Vitro Fert. Embryo Transfer. 4 : 162-167.
- Caro, C.M., A.Trounson, and C.Kirby. 1987. Effect of growth factors in culture medium on the rate of mouse embryo development and viability in vitro. J. In Vitro Fert. Embryo Transfer. 4 : 265-268.
- Chalot, C.L., C.A.Ziomek, B.D.Bavister, J.L.Lewis, and Torres. 1989. An improved culture medium supports development of randombred 1-cell mouse embryos in vitro. J. Reprod. Fert. 86 : 679-688.



- Chang, M.C. 1950. The effect of seminal plasma on fertilized rabbit ova. Proc. Nat Acad. Sci. U.S.A. 36 : 188.
- Chen, R.F. 1966. Removal of fatty acids from serum albumin by charcoal treatment. J. Biol. Chem. 242 : 173-181.
- Cholewa, J.A., and W.K.Whitten. 1970. Development of two-cell mouse embryos in the absence of a fixed-nitrogen source. J. Reprod.Fert. 22 : 553-555.
- Colonna, R., and F.Mangia. 1983. Mechanisms of amino acid uptake in cumulus-enclosed mouse oocytes. Biol. Reprod. 28 : 797-803.
- Cortesi, R., and O.S. Privett. 1972. Toxicity of fatty ozonides and peroxides. Lipid. 7 : 715-721.
- Cross, P.C., and R.L.Brinster. 1973. The sensitivity of one-cell mouse embryos to pyruvate and lactate. Exp. Cell. Res. 77 : 57-62.
- Cross, M.H. 1974. Rabbit blastocoel bicarbonate accumulation rate. Biol Reprod. 11 : 654.
- Dandekar, P.V., and R.H.Glass. 1990. Development of two-cell mouse embryos in proten-free and protein-supplemented media. J. In Vitro Fert. Embryo Transfer. 7 : 107-113.
- Doi, O., F. Doi, F.Schroder, A.W.Alberts, and P.R.,Vagelos. 1978. Manipulation of fatty acid composition of membrane phospholipid and its effects on cell growth in mouse LM cells. Biochim. Biophys. Acta. 509 : 239-250.

- Dubin, I.N., B. Czernobilsky, and B. Herbst. 1965. Effects of albumin fraction and linoleic acid on growth of macrophages in tissue culture. J. Nat. Cancer. Ins. 34 : 43-49.
- Edwards, R.G., P.C. Steptoe., and J.M. Purdy. 1970. Fertilization and cleavage in vitro of preovulator human oocytes. nature. 227 : 1037.
- Ellem, K.A.O., and R.B.L. Gwatkin. 1968. Patterns of nucleic acid synthesis in the early mouse embryo. Dev. Biol. 18 : 331-330.
- Epstein, C.J., and S.A. Smith. 1973. Amino acid up-take and protein synthesis in preimplantation mouse embryo. Dev. Biol. 33 : 171-184.
- Esfahani, N. M.H., R.J. Aitken., and M.H. Johnson. 1990. Hydrogen peroxide levels in mouse oocytes and early cleavage. Stage embryos developed in vitro or in vivo. Development. 109 : 501-507.
- Flynn, T.J., and N. Hillman. 1978. Lipid Synthesis from [u-c] glucose in preimplantation mouse embryos in culture. Biol. Reprod. 19 922-926.
- \_\_\_\_\_. 1980 The metabolism of exogenous fatty acids by preimplantation mouse embryos developing in vitro. J. Embryol. Exp. Morph. 56 : 157-168.
- Gerschenson, L.E., J.F. Mead, I. Harary, and D.F. Haggerty. 1967. Studies on the effects of essential fatty acid on growth rate, fatty acid composition, oxidative phosphorylation and respiratory control of Hela cells in culture. Biochim. Biophys. Acta. 131: 42-49.

- Gosden, R.G. 1974. Survival of transferred C57BL mouse embryos : Effects of age of donor and recipient. Fertil Steril. 25 : 348-351.
- Graves, C.N., and J.D. Biggers. 1970. Carbondioxide fixation by preimplantation mouse embryos. Science. 167 : 1506-1507.
- Hammond, J., JR. 1949. Recovery and Culture of tubal mouse ova. Nature. 163 : 28.
- Hanson, R.W., and F.J. Ballard. 1968. Citrate, pyruvate, and lactate contaminants of commercial serum albumin. J.Lipid Res. 9 : 667-668.
- Holley, R.W., J.H. Baldwin, and J.A. Kiernan. 1974. Control of growth of tumor cell by linoleic acid. Proc. Nat. Acad. Sci. USA. 71 3976-3978.
- Horgan, V.J., J. Philpot, B.W. Porter, and D.B. Roodyn. 1957. Toxicity of autoxidized squalene and linoleic acid, and of simple peroxides, in relation to toxicity of radiation. J. Biochem. 67 : 551-558.
- Jones, R., and T. Mann. 1977. Toxicity of exogenous fatty acid peroxides towards spermatozoa. J. Reprod. Fert. 50 : 255-260.
- Juetten, J., and B.D. Bavister. 1983. The effects of amino acids, cumulus cell, and bovine serum albumin on in vitro fertilization and first cleavage of hamster eggs. J. Exp. Zool. 227 : 487-490.
- Kane, M.T. 1972. Energy substrates on culture of single Cell rabbit ova to blastocysts. Nature. 238 : 468.



- Kane, M.T. 1975. Bicarbonate requirement for culture of one-cell rabbit ova to blastocyst. Biol. Reprod. 12 : 552-555
- \_\_\_\_\_. 1979. Fatty acids as energy sources for culture of one-cell rabbit ova to viable morulae. Biol. Reprod. 20 : 323-332.
- \_\_\_\_\_. 1983. Evidence that protease action is not specifically involved in the hatching of rabbit blastocysts caused by commercial bovine serum albumin in culture. J. Reprod. Fert. 68 : 471-475.
- \_\_\_\_\_. 1983. Variability in different lots of commercial bovine serum albumin affects cell multiplication and hatching of rabbit blastocysts in culture. J. Reprod Fert. 69 : 555-558.
- \_\_\_\_\_. 1985. A low molecular weight extract of bovine serum albumin stimulates rabbit blastocyst cell division and expansion in vitro. J. Reprod. Fertil. 73 : 147-150.
- Kane, M.T., and D.R. Headon. 1980. The role of commercial bovine serum albumin preparations in the culture of one-cell rabbit embryos to blastocysts. J. Reprod. Fertil. 60 : 469-475.
- Kane, M.T., E.W. Carney, and J.E. Ellington. 1992. The role of nutrients, peptide growth factors and co-culture cells in development of preimplantation embryos in vitro. Theriogenology. 38 : 297-313.

- Kane, M.T., and N.J. Buckley. 1977. The effects of inhibitors of energy metabolism on the growth of one-cell rabbit ova to blastocysts in vitro. J. Reprod. Fert. 49 : 261-266.
- Kane, M.T., and R.H. Foote. 1971. Factors affecting blastocyst expansion of rabbit zygotes and young embryos in the defined media. Biol. Reprod. 4: 41.
- Karin, N. 1978. Role of fatty acid in growth-promoting effect of serum albumin on hamster cell in vitro. J. Cell. Physiol. 96 : 1-14.
- Kuwahara, M., and S. Chaykin. 1973. Biosynthesis of pyrimidine nucleotides in early embryos of the mouse. J. Biol. Chem. 248 : 5095-5099.
- Lavy, G., M.P. Diamond., A. Pellicer., W.K. Vaughn., and A.H. Decherney. 1988. The effect of the incubation temperature on the cleavage rate of mouse embryo in vitro. J. In Vitro Fert. Embryo Transfer. 5 : 167-170.
- Long, J.A., and H.M. Evan. 1922. The oestrous cycle in the rats and its associated phenomena. Mem Univ. California b : 1-148.
- Long, J.A., J.F. Dickey, M.E. Richardson, and K.W. Ivey. 1991. Culture of ovine embryos in the absence of bovine serum albumin. Theriogenology. 35 : 383-391.
- Mackenzie, C.G., J.B. Mackenzie, and O.K. Reiss. 1967. Increase in cell lipid and cytoplasmic particular in mammalian cells cultured at reduced pH. J. Lipid. Res. 8 : 642-645.



- Maurer, R.R., R.H. Whitener, and R.H. Foote. 1969. Relationship of in vivo amete aging and exogenous hormones to early embryo development in rabbits. Proc Soc Exp Biol. Med. 131 : 882-885.
- Mclaren, A., and J.D. Biggers. 1958. Successful development and birth of mice cultivated in vitro as early embryos. Nature. 27 : 877-878.
- Messmer, T.O., and D.V. Young. 1976. The effects of biotin and fatty acids on SV3T3 cell growth in the presence of normal calf serum. Cell. Physiol. 90 : 265-270.
- Mickel, H.S., and J. Horbar. 1974. The effect of peroxidized arachidonic acid upon human platelet aggregation. Lipid. 9 : 68-71.
- Mills, R.M., and R.L. Brinster. 1967. Oxygen consumption of preimplantation mouse embryo. Expl Cell Res. 47 : 337-344.
- Mintz. 1964. Formation of genetically mosaic mouse embryos, and early development of lethal  $Zt^{12}/t^{12}$  normal mosaics. J. Exp. Zool 157 : 273-292.
- Moler, T.L., S.E. Donahue, and G.B. Anderson 1979. A simple technique for non-surgical embryo transfer in mice Lab Anim Sci. 29 : 353-356.
- Mukherjee. A.B., and M.M. Cohen. 1970. Development of normal mice by in vitro fertilization. nature 228 : 472-473.

- Murdoch, R.N, and R.G. Wales. 1973. Incorporation of [ $^{14}\text{C}$ ] glucose and [ $^3\text{H}$ ] uridine into the major classes of RNA in mouse embryos during preimplantation development. Aust J. biol Sci 26 : 889.
- Nadijacka, M., and N. Hillman. 1975. Autoradiographic Studies of  $t^n/t^n$  mouse embryos. J. Embryol exp. Morph. 33 : 725-730.
- Natsuyama, S., Y.Noda, K.Narimoto, and T. Mori. 1993. Role of protein supplements in the culture of mouse embryos. Theriogenology. 40 : 149-157.
- Nieder, G.L., and C.N.Corder. 1983. Pyruvate and lactate levels in oviducts of cycling, pregnant, and pseudopregnant mice. Biol. Reprod. 28 : 566-574.
- Nilausen, K. 1976. Role of fatty acids in growth Promoting effect of serum albumin on hamster cell in vitro J. Cell. Biol. 58 : 251.
- Noyes, R.W., Z. Dickmann, L.L.Doyle, and A.H.Gates. 1963. Delayed implantation. Chicao : University of Chicago Press.
- Ogawa, T., T. One, and R.P.Marrs. 1987. The effect of serum fractions on single-cell mouse embryos in vitro. J. Vitro Fert. Embryo. Transfer. 4 : 153-159.
- Ogawa, S., K. Satoh., and H. Hashimoto. 1971. in vitro culture of rabbit ova from the single cell to the blastocyst stage. nature. 233 : 422-424.



- Ozias, C.B., and S.Stern. 1973. Glycogen levels of preimplantation mouse embryos developing in vitro. Biol. Reprod. 8 : 467-473.
- Peters, D.F., G.B. Anderson, R. Bondurant, P.T. Cupps., and M. Drost. 1978. Transfer of cultured bovine embryos. Theriogenology. 10 : 337-342.
- Polet, H.S., and H.Polet. 1981. Requirement of a combination of a saturated and an unsaturated free fatty acid and a fatty acid carrier protein for in vitro growth of Lymphocytes. J. Immuno. 126 : 949-954.
- Quinn, P., and R.G. Wales. 1971, Fixation of Carbon dioxide by preimplantation mouse embryos in vitro and the activities of enzymes involved in the process. Aust. J. biol. Sci. 24 : 1277-1290.
- \_\_\_\_\_. 1973. Growth and metabolism of preimplantation mouse embryos cultured in phosphate-buffered medium J. Reprod Fert. 35 : 289-300.
- Quinn, P., and G.W. Harlow. 1978. The effect of oxygen on the development of preimplantation mouse embryos in vitro. J.Exp. Zool. 206 : 73-80.
- Quinn, P., and J.D.Stanger. 1980. Effect of purification of bovine serum albumin on the interaction of human serum with mouse ova in vitro. Biol. Reprod. 22 : 134-140.
- Ramwell, P.W., E.M.K.Leovey and A.L. Sintetos. 1977. Regulation of arachidonic acid cascade. Biol. Reprod. 16 : 70-87.



- Rosenthal, M.D. 1979. Selectivity in incorporation, utilization and retention of oleic and linolic acids by human skin fibroblasts. Lipid. 15 : 838-848.
- Roubal., W.T., and A.L.Tappel. 1966. Damage to proteins, enzymes, and amino acids by peroxidizing lipids. Archs Biochem. Biophys. 113 : 5-8.
- Saifer, A., and L. Goldman. 1961. The free fatty acids bound to human serum albumin. J. Lipid. Res. 2 : 268-270.
- Samuel, D., S.Paris., and G.Ailhavad. 1976. Uptake and metabolism of fatty acids and analogues by cultured cardiac cell from chick embryo. J.Biochem. 64 : 583-595.
- Sato, A., and R. Yamimachi. 1972. Transplantation of preimplantation hamster embryos. J. Reprod. Fert 30 : 329-332.
- Schenk, S.L. 1880. Das Sauerthierei Kunstlich bdfuchtet ausserhalb des mutter thieres. mitt. Embr. Inst K.K. Univ Wien 1, 107.
- Spector, A.A. 1975. Fatty acid binding plasma albumin. J.Lipid. Res. 16 : 165-179.
- Spector, A.A., K. John, and J.E.Fletcer. 1969. Binding of longchain fatty acids to bovine serum albumin. J.Lipid. Res. 10 : 56-66.
- Spector, A.A., S.N., mathur, T.L. kaduce., and B. T. Hyman. 1981. Lipid nutrition and Metabolism of Cultured mammalion cells. Prog Lipid. Res. 19 : 155-186.

- Tervit, H.R., D.G. Whittingham., and L.E.A. Rowson. 1972. Successful culture in vitro of sheep and cattle ova. J. Repord Fertil. 30 : 493-497.
- Tsai, P.Y., and R.P.Geyer. 1978. Effect of exogenous fatty acids on the retention of phospholipid acyl groups by mouse L fibroblasts. Biochem. Biophys. Acta. 528 : 344-354.
- Wales, R.G. 1970. Effects of ions on the development of the preimplantation mouse embryo in vitro Aust J. biol. Sci. 23 : 421.
- \_\_\_\_\_. 1975. Maturation of the mammalian embryo : biochemical aspects. Biol. Reprod. 12 : 66-81.
- Wales, R.G., and D.G. Whittingham. 1970. Metabolism of specifically labeled pyruvate by mouse mbryos during culture from the two-cell stae to the blastocyst. Aust. J. Biol. Sci 23 : 877-887.
- \_\_\_\_\_. 1974. Development of eight-cell mouseembryos in substrate-free medium. Aust. Soc. Reprod. Biol. : 316-317.
- Whitten, W.K. 1956. Culture of Tubal mouse ova. Nature 117 : 96.
- \_\_\_\_\_. 1957. Culture of tubal ova Nature. 179: 1081-1082.
- Whitten, W.K., and J.D.Biggers. 1968. Complete development in vitro of the pre-implantational stages of the mouse in a simple chemically defined medium. J. Reprod. Fert. 17 : 399-401.

- Whittingham, D.G. 1971. Culture of mouse ova. J. Reprod. Fert. Suppl. 14 : 7-21.
- \_\_\_\_\_. 1979. In vitro fertilization, embryo transfer and storage. Br. Med. Bull. 35 : 105-111.
- Whittingham, D.G., and B.D. Bavister. 1974. Development of hamster eggs fertilized in vitro or in vivo. J. Reprod. Fert. 38 : 489-492.
- Whittingham, D.G., and J.D. Biggers. 1967. Fallopian tube and early cleavages in the mouse. Nature. 213:942.
- Williams, R.E., R.J. Wisnieski, H.G. Rittenhouse, and C.F. Fox. 1974. Utilization of fatty acid supplements by cultured animal cells. Biochem. 13 : 1969-1977.
- Wright. R.W. G.B. Anderson, P.T. Cupps, M. Drost, and G.E. Bradford. 1976 a. in vitro culture of embryos from adult and prepuberal ewes. J. Anim Sci. 42 : 912.
- Yamanaka, W.K., G.W. Clemans, and M.L. Hutchinson. 1981. Essential fatty acid deficiency in humans. Prog Lipid. Res. 19 : 187-215.
- Yodyingyuad, V. 1982. Growth of the preimplantation hamster ova embryos in vivo and in vitro. Ph. D. thesis Cambridge University.



### ประวัติผู้เขียน

นายบุญทรirk เก้าเอี้ยน เกิดเมื่อวันที่ 9 มีนาคม 2510 ที่อำเภอเมือง  
จังหวัดพัทลุง สำเร็จการศึกษาระดับปริญญาตรี จากคณะวิทยาศาสตร์ มหาวิทยาลัย  
เกษตรศาสตร์ เมื่อปีการศึกษา 2534 และเข้าศึกษาต่อในหลักสูตรปริญญาวิทยา-  
ศาสตร์มหาบัณฑิต ที่จุฬาลงกรณ์มหาวิทยาลัย เมื่อปีการศึกษา 2534

