Jonathan Van Blerkom

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Department of Molecular, Cellular, and Developmental Biology
University of Colorado at Boulder
Boulder, CO 80309-0347

Education:

B.S.: New York City College 1969 (General Honors and Honors in Biology and Biochemistry)

Ph.D.: Department of Molecular, Cellular, and Developmental Biology, University of Colorado at Boulder, 1974

Academic Positions:

1975: Fellow, European Molecular Biology Organization, Cambridge University, Cambridge, England

1976-1978: Lecturer, Department of Pediatrics, B.F. Stolinsky Laboratory, University of Colorado Health Sciences Center, Denver, CO

1978-1985: Senior Researcher, Department of Molecular, Cellular, and Developmental Biology, University of Colorado at Boulder

1981-1993: Faculty Fellow, Institute of Behavioral Genetics, University of Colorado at Boulder

1986-88: Assistant Professor (attendant) Department of Molecular, Cellular, and Developmental Biology, University of Colorado at Boulder

1988-presesent: Research Professor, Department of Molecular, Cellular, and Developmental Biology, University of Colorado at Boulder

Clinical Activities:

1982-1998: IVF Laboratory Director, Reproductive Genetics In Vitro, Denver, CO

1998-present: IVF LaboratoryDirector, Colorado Reproductive Endocrinology, Rose Medical Center, Denver, CO

Patents

U.S. Patent (4,840,891), Polymeric Encapsulation of Sperm for Artificial Insemination, June, 1989

U.S. Patent (RE 34,326), Polymeric Encapsulation, Storage and Programmed Delivery of Sperm for Artificial Insemination, June 1993

Professional Activities and Service:

Editorial Board, *Electron Microscopy in Biology and Medicine*, 1979-1984
Member, Board of Scientific Advisors, Genetic Engineering, Inc., Denver, 1981-1982
Chairman, Board of Scientific Advisors, Genetic Engineering, Inc., Denver, 1982-1985
Member, National Institute of Medicine Committee on MedicallyAssisted Conception, 1987-1988
Associate Editor, *International Journal of Developmental Biology*, 1988-1993
Guest Editor, *Journal Electron Microscopic Technique*, 1989
Board of Scientific Advisors, Progenitor, Inc., 1993-1998
Editorial Board, *Human Reproduction Update*, 1994-1996
Editorial Board, *Molecular Human Reproduction*, 1996-2001
Editorial Board, *Reproductive Biomedicin Onlinee*, 2000- present
Section Editor, Reproductive Biomedicine Online, 2011-present
Consulating Member of United States FDA Advisory Panels, 2002-2004
Associate Editor, Molecular Human Reproduction, 2007-2011
Embryo Advisory Board, Schering Plough, Inc. 2008-2010
Associate Editor, Human Reproduction Update, 2009- 2012
Guest Edtior, Series on Mitochondria in Development, Mitochondrion, 2010-2011
Editorial Board Member, Zygote, 2010-2016

European Society of Human Reproduction and Embryology (ESHRE) Expert Panel on Oocyte and Embryo Assessment. 2010
Senior Editor, Zygote, 2016---2023
Board Certification: Clinical Embryologist, American College of Embryology, 2011
Editorial Board: Facts, Views and Vision in Obstetrics and Gynecology 2013-present
Editor-in-Chief, Zygote, 2024

Honors

2003; General Program Prize Paper, 59th Annual Meeting of the American Society of Reproductive Medicine
2014: American College of Embryology: Embryologist of the Year
2014: University of Colorado Boulder Faculty Assembly Award for Excellence in Research and Creative Work
2015: Popular Science Magzine Named Simplified IVF System as 'Best of What's New Award' for Top Technical Inovations of 2014.
2015: Robert G. Edwards Prize Paper Award
2018: Selection the Simlified IVF Cuture System (Van Blerkom et al, 2014) developed at MCDB by the British Mueseum of Science and Technology, London, as one of the most significant advances in IVF treatment to be exhibited in a display celebrating the 40th anniversay of the birth of first IVF baby
2018: Marinus Smith Award, University of Colorado,

Speaking Invitations
(accepted 2017-2023)

Best of ASRM/ESHRE, Paris
Invited speaker, Canadian Society of Embryologists, Toronto
Invited Speaker, Annual REI Congress: Scientific and Therapeutic Approaches to Assisted Reproductive Medicine, Las Vegas
Invited Speaker, Symposium: Building A Bridge Between Science and Clinical Practice, Barcelona, Spain

(accepted 2018).

Keynote Speaker: 9th World ISMAAR Congress, London
Keynote speaker; 12th Biennial Alpha Congress, Reykjavik, Iceland
Session Organizer and Speaker: XI Ovarian Club Symposium: From Science to Clinic. Paris

2019: (accepted)
Invited Lecture: The Molecular Organization of the Oolemma and Fertilization Competence: London, UK
Invited Lecture: Simplifying IVF: Genk, Belgium

2020- 2021: invited lectures and meeting participation cancelled due C-19

2023

invited lecture, Queens Institte of Medicine, Universit of Bolton, UK

invited lecture, Medical Education Academy, Milan, Italy

PUBLICATIONS

(1) Van Blerkom, J., C. Manes and J.C. Daniel (1973) Development of preimplantation rabbit embryos *in vivo* and *in vitro*. I. An ultrastructural comparison. Dev. Biol. 35:262-282.

(2) Van Blerkom, J. and C. Manes (1974) Development of preimplantation rabbit embryos *in vivo* and *in vitro*. II. A comparison of qualitative aspects of protein synthesis. Dev. Biol. 40:40-51.

(3) Motta, P. and J. Van Blerkom (1974) Présence d'un materiel characteristique granulaire dans le cytoplasma de l'ovocytes et dans les premiers stades de la differentiation des cellules embryoaires. Bull. Assoc. Anat. Fr. 58:349-356.

(4) Motta, P. and J. Van Blerkom (1974) A scanning electron microscopic study of the luteo-follicular complex. I. Follicle and oocyte. J. Submicro. Cytol. 6:297-310.

(5) Van Blerkom, J. and G. Brockway (1975) Qualitative patterns of protein synthesis in the preimplantation mouse embryo. I. Normal pregnancy. Dev. Biol. 44:148-157.

(6) Van Blerkom, J. and G. Brockway (1975) Qualitative patterns of protein synthesis in the preimplantation mouse embryo. II. During release from facultative delayed implantation. Dev. Biol. 46:446-451.

(7) Van Blerkom, J. (1975) Protein synthesis during preimplantation embryogenesis. Res. Reprod. 7:1-3.

(8) Motta, P. and J. Van Blerkom (1975) A scanning electron microscopic study of the luteo-follicular complex. II. Events leading to ovulation. Am. J. Anat. 143:241-265.

(9) Motta, P. and J. Van Blerkom (1975) A scanning electron microscopic study of rabbit spermatozoa in the female reproductive tract after coitus. Cell and Tissue Res. 163:29-45.

(10) Van Blerkom, J. and M.N. Runner (1976) The fine structure of parthenogenetically activated preimplantation mouse embryos. J. Exp. Zool. 196:113-124.

(11) Van Blerkom, J., S. Barton and M.H. Johnson (1976) Molecular differentiation of the preimplantation mouse embryo. Nature (Lond.) 259:319-321.

(12) Van Blerkom, J. and M.H. Johnson (1976) A molecular approach to the study of preimplantation development in mammals. J. Anat. 122:727-729.

(13) Van Blerkom, J. and P. Motta (1977) Changes occurring in the head region of rabbit spermatozoa after coitus and in the uterus as observed by scanning and transmission electron microscopy. Acta Anat. 99:344-345a.

(14) McGaughey, R.W. and J. Van Blerkom (1977) Patterns of polypeptide synthesis of porcine oocytes during maturation *in vitro*. Dev. Biol. 56:241-254.

(15) Van Blerkom, J. (1977) Molecular approaches to the study of oocyte maturation and preimplantation embryonic development. In: *Immunobiology of the Gametes* (M. Edidin and M.H. Johnson, eds.), Cambridge University Press.

(16) Van Blerkom, J. and C. Manes (1977) The molecular biology of preimplantation embryogenesis. In: *Concepts in Mammalian Embryogenesis* (M.I. Sherman, ed.), M.I.T. Press.

(17) Van Blerkom, J. and R.W. McGaughey (1978) Molecular differentiation of the rabbit ovum. I. During oocyte maturation *in vivo* and *in vitro*. Dev. Biol. 63:139-150.

(18) Van Blerkom, J. and R.W. McGaughey (1978) Molecular differentiation of the rabbit ovum. II. During the preimplantation development of *in vivo* and *in vitro* matured oocytes. Dev. Biol. 63:151-164.

(19) Van Blerkom, J. and P. Motta (1978) A scanning electron microscopic study of the luteo-follicular complex. III. The repair of the follicle and the formation of the corpus luteus. Cell Tiss. Res. 189:131-153.

(20) Barberini, S., J. Van Blerkom and P. Motta (1978) Changes in the surface of the rabbit endometrium related to the estrous and progestational stages of the reproductive tract. Cell Tiss. Res. 190:207-222.

(21) Van Blerkom, J. (1978) Methods for the high resolution analysis of protein synthesis: Applications to studies of early mammalian development. In: *Methods in Mammalian Reproduction* (J.C. Daniel, ed.), Academic Press.

(22) Motta, P. and J. Van Blerkom (1978) Structure and ultrastructure of the mammalian Graafian follicle. In: *Ovulation*: *Mechanisms*, *Detection*, *Prediction and Regulation* (E.S.E. Hafez, ed.), Elsevier, North Holland Pub.

(23) Chavez, D.J. and J. Van Blerkom (1979) Persistence of RNA synthesis during facultative delayed implantation in the mouse. Dev. Biol. 70:39-49.

(24) Van Blerkom, J. (1979) Molecular differentiation of the rabbit ovum. III. Fertilization- autonomous polypeptide synthesis. Dev. Biol. 72:188-194.

(25) Van Blerkom, J. and Motta, P. (1979) *The Cellular Basis of Mammalian Reproduction*. Urban and Schwartenberg, Baltimore and Munich.

(26) Van Blerkom, J. and P. Motta (1979) Morphodynamic aspects of the ovarian superficial epithelium as revealed by transmission, scanning and high voltage electron microscopy. Ann. Biol. Anim. Biophys. 19:1559-1567.

(27) Van Blerkom, J., D.J. Chavez and H. Bell (1979) The molecular and cellular biology of facultative delayed implantation *in vivo* and *in vitro*. In: *Maternal Recognition of Pregnancy* (CIBA Symposium No. 64)., Excerpta Medica, Amsterdam.

(28) Motta, P., J. Van Blerkom and S. Makabe (1980) Changes in the superficial morphology of the ovarian “germinal epithelium" during the reproductive cycle and in pathological conditions. J. Submicro. Cytol. 12:407-425.

(29) Van Blerkom, J. (1980) The molecular biology of mammalian oogenesis and oocyte maturation. In: *The Biology of the Ovary* (P. Motta and E.S.E. Hafez, eds.), Martinus Nijhoff, The Hague.

(30) Motta, P. and J. Van Blerkom (1980) The biology of ovulation. In: *The Biology of the Ovary* (P. Motta and E.S.E. Hafez, eds.), Martinus Nijhoff, The Hague.

(31) Van Blerkom, J. and P. Motta (1980) Morphodynamic aspects of the ovarian superficial epithelium. In: *Development and Maturation of the Reproductive Organs* (P. Mauleon, ed.), Martinus Nijhoff, The Hague.

(32) Schliwa, M. and J. Van Blerkom (1981) Interactions of cytoskeletal components and a comparison of their images in lysed and unlysed cells. J. Cell Biol. 90:222-235.

(33) Schliwa, M., J. Van Blerkom and K.R. Porter (1981) In vitro stabilization of the cytoplasmic ground substance and analysis of its biochemical composition. Proc. Natl. Acad. Sci. USA 78:4329-4333.

(34) Van Blerkom, J. and D.J. Chavez (1981) Morphodynamics of outgrowths of mouse trophoblast in the presence and absence of a monolayer of uterine epithelium. Am. J. Anat. 162:143-155.

(35) Van Blerkom, J. (1981) The structural relation and posttranslational modification of stage-specific proteins synthesized during early preimplantation development in the mouse. Proc. Natl. Acad. Sci. USA 78:7629-7633.

(36) Van Blerkom, J. (1981) Intrinsic and extrinsic patterns of molecular differentiation during oogenesis, embryogenesis and organogenesis in mammals. In: *Molecular and Cellular Aspects of Implantation* (D. Bullock and S. Glasser, eds.), Plenum Press.

(37) Chavez, D.J. and J. Van Blerkom (1981) Attachment and outgrowth *in vitro* of mouse trophectoderm. In: *Molecular and Cellular Aspects of Implantation* (D. Bullock and S. Glasser, eds.), Plenum Press.

(38) Wagner, T.E., J. Van Blerkom and J.D. Jollick (1982) Gene chimeric mammals: Mice developed from zygotes microinjected with rabbit beta globin genes producing rabbit globin. DNA 1:165-168.

(39) Schliwa, M., J. Van Blerkom and K.B. Pryzwansky (1982) Structural organization of the cytoplasm. In: *Cold Spring Harbor Symposium on Quantitative Biology 46* (The Cytoplasm), Cold Spring Harbor Laboratory Press, pp. 51- 67.

(40) Schliwa, M., J. Van Blerkom and K.B. Pryzwansky (1982) Implications of cytoskeletal interactions for cellular architecture and behavior. Phil. Trans. R. Soc. Lond. 299:199-205.

(41) Van Blerkom, J., R. Janzen and M.N. Runner (1982) The patterns of protein synthesis during foetal and neonatal organ development are remarkably similar. J. Embryol. Exp. Morph. 72:97-116.

(42) Weil, J., C.J. Epstein, J. Van Blerkom and N. Xuong (1983) Computer-assisted analysis demonstrates that polypeptides induced by natural and recombinant human interferon-alpha are the same and that some have related primary structures. Antiviral Res. 3:303-314.

(43) Van Blerkom, J. (1983) Posttranscriptional and posttranslational controls during early mammalian embryogenesis. In: *Indo-US Symposium on Ovo-Implantation* (B. Saxena and K. Yoshinaga, eds.), IIMS Pub.

(44) Van Blerkom, J. and M.N. Runner (1984) Mitochondrial reorganization during resumption of arrested meiosis in the mouse oocyte. Am. J. Anat. 171:335-355.

(45) Van Blerkom, J., G. Henry and R. Porreco (1984) Preimplantation human embryonic development of polypronuclear eggs after *in vitro* fertilization. Fertil. Steril. 41:686-696.

(46) Van Blerkom, J., G. Henry and R. Porreco (1984) Morphologically normal-appearing preimplantation stage human embryos can develop from polypronuclear eggs after *in vitro* fertilization: Sequestration of aberrant cells to extraembryonic lineage. J. IVF and ET 2:146-147.

(47) Henry, G., J. Van Blerkom and R. Porreco (1984) Ultrastructurally-guided uterine placement of human embryos after *in vitro* fertilization. J. IVF and ET 2:115-116.

(48) Janzen, R.G., J. Van Blerkom and M.N. Runner (1984) Identification and characterization of glycoproteins secreted by the skin of the day 16 fetal mouse. J. Exp. Zool. 232:99-106.

(49) Johnson, M.H., J. McConnell and J. Van Blerkom (1984) Programed development in the mouse embryo. J. Emb. Exp. Morph. 83:197-231.

(50) Henry, G., J. Van Blerkom and R. Porreco (1984) Human *in vitro* fertilization in a private program: Reproductive genetics *in vitro*. J. IVF and ET 1:76-79.

(51) Van Blerkom, J. and P. Motta (eds.) (1984) *Ultrastructure of Reproduction*: *Gametogenesis*, *Fertilization and Embryogenesis*, Martinus Nijhoff, Boston.

(52) Van Blerkom, J. (1985) Posttranslational modification of proteins during resumption of arrested meiosis and early embryogenesis in the mammal. In: *Control of Cell Growth and Proliferation* (C.M. Veneziale, ed.), Van Nostrand, Reinhold, Co., pp. 67-86.

(53) Van Blerkom, J. (1985) Protein synthesis during oogenesis and early embryogenesis in the mammal. In: *Biology of Fertilization*, *Vol. 3* (C.B. Metz and A. Monroy, eds.), Academic Press, NY, pp. 379-399.

(54) Van Blerkom, J. (1985) Extragenomic regulation and autonomous expression of a developmental program in the early mammalian embryo. Ann. N.Y. Acad. Sci. 442:58-72.

(55) Carroll, S., P.D. Riley, M. Klymkowsky, J. Van Blerkom, J. Stewart and M.P. Scott (1986) Localization of homoeodomain-containing proteins using antibodies against synthetic oligopeptides. In: *Gametogenesis and the Early Embryo*, Alan Liss, Inc., pp. 257-270.

(56) Van Blerkom, J. and H. Bell (1986) Regulation of development in the fully grown mouse oocyte: Chromosome-mediated temporal and spatial differentiation of the cytoplasm and plasma membrane. J. Embryol. exp. Morph. 93:213-238.

(57) Van Blerkom, J., H. Bell and G. Henry (1987) The occurrence, recognition and developmental fate of pseudomultipronuclear eggs after *in vitro* fertilization of human oocytes. Human Reprod. 2:217-225.

(58) Van Blerkom, J. and G.P. Henry (1988) Cytogenetic analyses of living human oocytes: Cellular basis and developmental consequences of perturbations in chromosomal organization and complement. Human Reprod. 3:777-790.

(59) Van Blerkom, J. and P. Motta (eds.) (1989) *Ultrastructure of Human Gametogenesis and Embryogenesis*, Kluwer Acad. Pub., Boston.

(60) Van Blerkom, J. (1989) Developmental failure in human reproduction associated with preovulatory oogenesis and preimplantation embryogenesis. IN: *Ultrastructure of Human Gametogenesis and Embryogenesis* (J. Van Blerkom and P. Motta, eds.), Kluwer Acad. Pub., pp. 125-180.

(61) Van Blerkom, J. (1989) Morphodynamics of nuclear and cytoplasmic reorganization during the resumption of arrested meiosis in the mouse oocyte. Prog. in Clin. and Biol. Res. 294:33-52.

(62) Van Blerkom, J. (1989) The origin and detection of chromosomal abnormalities in meiotically mature human oocytes obtained from stimulated follicles and after failed fertilization in vitro. Prog. in Clin. and Biol. Res. 296:299-310.

(63) Van Blerkom, J. (1989) Maturation of germinal vesicle stage mouse oocytes at high frequency after cryopreservation. I. Alterations in cytoplasmic, nuclear, nucleolar and chromosomal structure and organization associated with vitrification. Human Reprod. 4:883-898.

(64) Van Blerkom, J. (1989) Experimental approaches to the study of early developmental failure in human reproduction. IN: *The Basic Science Foundation of Medically-Assisted Conception* (K. Ryan *et al*., eds.), National Academy of Sciences, pp. 234-249.

(65) Van Blerkom, J. (1990) Cellular and Developmental Biological Aspects of Bovine Meiotic Maturation, Fertilization, and Preimplantation Embryogenesis in Vitro. JEMT 16:298-323.

(66) Van Blerkom, J. (1990) Occurrence and Developmental Consequences of Aberrant Cellular Organization in Meiotically Mature Human Oocytes after Exogenous Ovarian Hyperstimulation. JEMT 16:324-346.

(67) Van Blerkom, J. (1991) Intrinsic and extrinsic influences on the expression of molecular and cellular differential in human oocytes and embryos. IN: *The Biology and Chemistry of Mammalian Fertilization* (P.M. Wassarman, ed.), CRC Press.

(68) Van Blerkom, J. and G. Henry (1991) Dispermic fertilization of human oocytes. JEMT 17:437-449.

(69) Van Blerkom, J. (1991) Cryopreservation of the mammalian oocyte. IN: *Animal Applications of Research in Mammalian Development* (Cold Spring Harbor Laboratory Press), pp. 83-119.

(70) Van Blerkom, J. (1991) Microtubule mediation of cytoplasmic and nuclear maturation during the early stages of resumed meiosis in cultured mouse oocytes. Proc. Natl. Acad. Sci. USA 88:5031-5035.

(71) Van Blerkom, J. and G.H. Henry (1992) Oocyte dysmorphism and aneuploidy in meiotically-mature human oocytes after controlled ovarian stimulation. Human Reprod. 7(3):379- 390.

(72) Van Blerkom, J. (1993) Development of human embryos to the hatched blastocyst stage in the presence or absence of a monolayer of Vero cells. Human Reprod. 8:1525-1539.

(73) Van Blerkom, J. (1994) Developmental failure in human reproduction associated with chromosomal abnormalities and cytoplasmic pathologies in meiotically-mature oocytes. IN: *The Biological Basis of Early Reproductive Failure in the Human: Applications to Medically Assisted Conception in the Treatment of Infertility* (J. Van Blerkom, ed.). Oxford University Press. pp. 283-325.

(74) Van Blerkom, J. (1994) Intrinsic factors affecting the outcome of laboratory-assisted conception in the human. IN: *The Biological Basis of Early Reproductive Failure in the Human: Applications to Medically Assisted Conception in the Treatment of Infertility* (J. Van Blerkom, ed.). Oxford University Press. pp. 3-27.

(75) Van Blerkom, J. and P. Davis (1994) Cytogenetic, cellular and developmental consequences of cryopreservation of immature and mature mouse and human oocytes. Micr. Res. Tech. 27:165-193.

(76) Van Blerkom, J., P. Davis and J. Merriam (1994) The developmental ability of human oocytes penetrated at the germinal vesicle stage after insemination in vitro. Human Reprod. 9:697-708.

(77) Van Blerkom, J. (1994) The History, Current Status and Future Prospects for Research Involving Human Embryos: A Report to the National Institutes of Health Panel on Human Embryo Research. In: *Report of NIH Human Embryo Research Panel*. U.S. Government Printing Office.

(78) Van Blerkom, J., P. Davis and J. Merriam (1994) A retrospective analysis of unfertilized and presumed parthenogenetically activated human oocytes demonstrated a high frequency of sperm penetration. Human Reprod. 9:2381-2388.

(79) Van Blerkom, J., P. Davis and J. Lee (1995) ATP content of human oocytes and developmental potential and outcome after in-vitro fertilization and embryo transfer. Human Reprod. 10:415-424.

(80) Van Blerkom, J., J.P. Davis, J. Merriam and J. Sinclair (1995) Nuclear and cytoplasmic dynamics of sperm penetration, pronuclear formation, and microtubule organization during fertilization and early preimplantation development in the human. Human Reprod. Update 1:429-461.

(81) Van Blerkom, J. and P. Davis (1995) Evolution of the sperm aster after microinjection of isolated human sperm centrosomes into meiotically mature human oocytes. Mol. Human Reprod. 1:2179-2182.

(82) Van Blerkom, J. (1996) The influence of intrinsic and extrinsic factors on the developmental potential and chromosomal normality of the human oocyte. J. Soc. Gynecol. Invest. 3:3-11.

(83) Van Blerkom, J. (1996) Sperm centrosome dysfunction: A possible new class of male factor infertility in the human. Mol. Human. Reprod. 2:349-354.

(84) Tarin, J., F. Vendrell, J. Van Blerkom and A. Cano (1996) The oxidant agent tertiary butyl hydroperoxide induces disturbances in spindle structure, c-meiosis, and aneuploidy in mouse oocytes. Mol. Human Reprod. 12:895-902.

(85) Van Blerkom, J., M.Antczak and R Schrader (1997) The developmental potential of the human oocyte is related to the dissolved oxygen content of follicular fluid: association with vascular endothelial growth factor levels and perifollicular blood flow characteristics. Human Reprod. 12:1047-1055.

(86) Cioffi, J. J. Van Blerkom, M. Antczak, A. Shafer, S. Wittmer and R. Snodgress (1997) The expression of leptin and its receptors in pre-ovulatory human follicles. Mol. Human Reprod. 3:467-472.

(87) Van Blerkom, J. (1997) Can the developmental competence of early human embryos be predicted effectively in the clinical IVF laboratory? Human Reprod. 12:1610-1614.

(88) Van Blerkom, J. (1997) The earliest events of human fertilization. In: *Microscopy of Reproduction and Development: A Dynamic Approach* (P. Motta, ed.).

(89) Van Blerkom, J. (1997) Human ovarian follicular vascularity, oxygen content and the developmental potential of the preovulatory oocyte. Proc. 19th World Cong. on In Vitro Fertilization and Embryo Transfer (V. Gamely and P. Leung, eds.). Monduzzi Editore, Rome. Pp. 743-750.

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(91) Antczak, M. and J. Van Blerkom (1997) Oocyte influences on early development: The regulatory proteins leptin and STAT3 are polarized in mouse and human oocytes and differentially distributed within the cells of the preimplantation stage embryo. Mol. Human Reprod. 3:1067-1086..

(92) Van Blerkom, J. and P. Davis (1998) DNA strand breaks and phosphatidylserine redistribution in newly ovulated and cultured mouse and human oocytes: occurrence and relationship to apoptosis. Human Reprod. 13:1317-1324.

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(100) Van Blerkom, J. Davis, P. and Alexander, (2001) Human embryo fragmentation: A multifaceted microscopic, biochemical and experimental study of fragmentation in early human preimplantation stage embryos Human Reprod. 16, 719-729.

(101) Van Blerkom, J. and Davis, P. (2001). Differential effects of repeated superovulation on cytoplasmic and spindle organzation and DNA stability in MII mouse oocyte matured in vivo and in vitro. Human Reprod. 16. 757-764.

(102) Van Blerkom, J. (2002). Epigenetic influences on human oocyte and embryo development: The relationship between developmental competence and perifollicular blood flow and vascularity. In. De Jong ed). Assisted Reproduction in the Human, Cambridge Univ. Press.

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(109) Jones, A. Van Blerkom, J., Davis, P. and Toledo, A. (2004). Cryopreservation of Metaphase II Human Ooocytes Effects Mitochondrial Inner Membrane Potential: Implications for Developmental Competence. Human Reproduction 19: 1861-1866.

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The following are planned or currently in preparation for ZYGOTE in my capacity as Editor-in Chief

(140). Van Blerkom J (2024) Energy and outcome (in preparation)

(141). Van Blerkom J (2024). How endosome-mediated information transfer has provided new insight into the biology of gametes, preimplantation embryos and the maternal recognition of pregnancy: from ovary to implantation.

(142) Van Blerkom, J. (2024) The role of the subcortical maternal complex in preimplantation embryogenesis and reproductive disorders.