

7. Literaturverzeichnis

ADAMS, G. P.; MATTERI, R. L.; KASTELIC, J. P.; KO, J. C. H.; GINTHER, O. J. (1992):

Association between surges of follicle-stimulating hormone and the emergence of follicular waves in heifers.

J. Reprod. Fertil., **94**: 177-188.

ADAMS, G. P.; KOT, K; SMITH, C. A.; GINTHER, O. J. (1993):

Selection of a dominant follicle and suppression of follicular growth in heifers.

Anim. Reprod. Sci., **30**: 259-271.

ADAMS, G. P. (1998):

Control of ovarian follicular wave dynamics in mature and prepubertal cattle for synchronization and superstimulation.

AACV, Sydney, 595-605.

ADASHI, E. Y.; RESNIK, C. E.; BRODIE, A. M.; SVOBODA, M. E.; VAN WYK, J. J. (1985a):

Somatomedin C mediated potentiation of follicle stimulating hormone induced aromatase activity of cultured rat graulosa cells.

Endocrinology, **117**: 2313-2320.

ADASHI, E. Y.; RESNIK, C. E.; SVOBODA, M. E.; VAN WYK, J. J. (1985b):

Somatomedin C enhances induction of luteinizing hormone receptors by follicle stimulating hormone in cultured rat granulosa cells.

Endocrinology, **116**: 2369-2375.

ADASHI, E.Y.; RESNIK, C. E.; SVOBODA, M. E.; VAN WYK, J. J. (1985c):

Insulin Like growth factors as intraovarian regulators of granulosa cell growth and function.

Endocr. Rev., **6**: 400-420.

ADASHI, E. Y. u. RESNIK, C. E. (1986):

Antagonistic interaction of transforming growth factors in the regulation of granulosa cell differentiation.

Endocrinology, **199**: 1879-1881.

AHMAD, N.; SCHRICK, F. N.; BUTCHER, R. L.; INSKEEP, E. K. (1995):

Effect of persistent follicles on early embryonic losses in beef cows.

Biol. Reprod., **52**: 1129-1135.

AHMED ELBBIARY, N. A.; LENTON, E. A.; WELSBY, R.; MOWFORTH, A.; COOKE, I. D. (1995)

Folliculocentesis: a novel research technique to investigate the intrafollicular endocrine microenvironment.

Hum. Reprod., **10**: 2325-2333.

ALI, A.; GILLES, M.; LANGE, A.; GLATZEL, P. S. (1998):

Follicle dynamics and ovulation rate in dairy cows following ablation of the dominant follicle and prostaglandin F_{2α} application.

In: Gametes, development and function, Ed. by A. LAURIA, F. GANDOFLI, G., ENNE, L. GIANAROLI, Serona Symposia, Italy, pp:503.

ALILA, H. W. u. HANSEL, W. (1984):

Origin of different cell types in the bovine corpus luteum as characterized by specific monoclonal antibodies.

Biol. Reprod., **31**: 17015-17025.

ALLEN, W. R. u. STEWARD, F. (1978):

The biology of Pregnant mare serum gonadotrophin (PMSG).

In: Control of reproduction in the cow, Ed. by J. R. SREENAN (1978), Verlag Martinus Nijhoff, 50-72.

ASDEL, S. A. (1962):

Mechanism of ovulation.

In: The Ovary, Ed by S. ZUKERMAN, London, Academic Press.

ASSEY, R. J.; HYTTEL, P.; ROCHE, J. F. and BOLD, M. (1994):

Oocyte structure and follicular steroids concentrations in superovulated versus unstimulated heifers.

Mol. Reprod. Dev., **39**: 8-16.

AUSTIN, E. J.; MIHM, M.; RYAN, M. P.; WILLIAMS, D.; ROCHE, J. F. (1998):

Controlling duration of dominance of the ovulatory follicle: effects on fertility and synchrony of oestrus.

Proc. 24th Meeting Irische Grassland and Anim. Prod. Assoc., pp:3-4.

BADINGA, L.; DRIANCOURT, M. A.; SAVIO, J. D.; WOLVENSON, D.; DROST, M.; DE LA SOTA, R. L.; THATCHER, W. W. (1992):

Endocrine and ovarian responses associated with the first-wave dominant follicle in cattle.

Biol. Reprod., **47**: 871-883.

BAIRD, T. G.; CAMPELL, B. K.; MANNS, G. E.; McNEILLY, A. S. (1991):

Inhibin and estradiol in the control of FSH-secretion in the sheep.

J. Reprod. Fertil., **43** (Suppl.), 125-138.

BAKER, T. G. (1972):

Oogenese und Ovulation.

In: Fortpflanzungsbiologie der Säugetiere. Band 1: Keimzellen und Befruchtung. AUSTIN, R und SCHORT, V. (Hrsg). Verlag PAUL PAREY. Berlin und Hamburg, S 19-40.

BAKER, T. G. u. HUNTER, R. H. (1978):

Oogenesis and follicular growth in the cow: implications for superovulation.

In: Control of Reproduction in the cows . SREENAN (Ed.), Martinus Nijhoff, Boston, S. 34-49

BAO, B. u. GARVERICK, H. A. (1998):

Expression of steroidogenic enzyme and gonadotropin receptor genes in bovine follicles during ovarian follicular waves: a review.

J. Anim. Sci., **76**: 1903-1921.

BARTMAN, C. P. (1992):

Untersuchung zur Verbesserung der Superovulationsergebnisse beim Rind durch Entfernung des dominanten Follikels am Eierstock mit Hilfe der Sonographie.

Diss. Vet. Met., Hannover.

BEARCH, A. J.; SAVOA, D.; GLENROSS, R. G.; MCLEOD, B. J.; KNIGHT, P. G., (1989):

Treatment of ovariectomized heifers with bovine follicular fluid specially suppresses pituitary levels of FSH.

J. Mol. Endocrinol., **3**: 85-91.

BECKER, F. (1995):

Untersuchungen zur Follikelentwicklung und zur Luteolyse nach PGF_{2α} Applikation an verschiedenen Zyklustagen beim Rind.

Diss. Vet. Med., FU-Berlin.

BECKER, F.; KANITZ, W.; NÜRNBERG, W.; KURTH, J.; SPITSCHAK, M. (1996):

Comparison of pretreated transvaginal ovum pick up in heifers by ultrasonographic and endoscopic instrument.

Theriogenology, **46**: 999-1007.

BERGFELT, D. R.; LIGHTFOOT, K. C.; ADAMS, G. P. (1994):

Ovarian dynamic following ultrasound-guided transvaginal follicle ablation in heifers.

Theriogenology, **42**: 895-907.

BERGFELT, E. G. M.; KOJIMA, F. N.; CUPP, A. S.; WEHRMAN, M. E.; PETERS, K. E.; MARISCAL, V.; SANCHES, M.; KINDER, J. E. (1996):

Changing dose of progesterone result in sudden changes in frequency of luteinizing hormone pulses and secretion of 17β-estradiol in bovine females.

Biol. Reprod., **54**: 546-553.

BERNARD, C.; LAMBERT, R. D.; BELAND, R.; BELANGER, A. (1984):

Laparoscopic investigation of the bovine ovary in the preovulatory phase of the cycle.

Theriogenology, **22**: 143-150.

BETTERIDGE, K. J. (1977):

Superovulation.

In: BETTERIDGE, K. J. (Ed.), Embryotransfer in Farm Animals.

Monograph, **16**: 1-9.

BICASAK, T. A.; SHIMONAKA, M.; MALKOUSKI, M.; LING, N. (1990):

Insulin like growth factor binding protein (IGF-BP), inhibition of granulosa cell function: effect on cyclic adenosine 3', 5'-Monophosphate, Deoxyribonucleic acid synthesis and comparison with the effect on an IGF1 antibody.

Endocrinology, **126**: 2184-2189.

BO, G. A.; CACCIA, M.; MARTINEZ, M.; ADAMS, G. P.; PIERSON, R. A.; MAPLETFOT, R. J. (1994):

The use of estradiol -17 β and progesteron treatment for the control of follicular wave emergence in beef cattle.

Theriogenology, **41**: 165 (Abst).

BOTZ, R. (1991):

Untersuchungen zur Verbesserung der Auswahl von Spendertieren für den Embryotransfer beim Rind mit Hilfe der Sonographie.

Diss. Vet. Med., Hannover.

BRITT, J. H. (1992):

Impacts of early postpartum metabolism on follicular development and fertility.

Bovine practitioner, **24**:39-43.

BROGLIATTI, G. M.; LAGOMARSINO, H.; ADAMS, G. P. (1998):

Follicle ablation for ovulation synchronization in cattle.

Theriogenology, **49**: 339 (Abst.).

BROWN B. W. u. DRIANCOURT, M. A. (1989):

Blood flow in the ovaries and ovarien follicles of romanov and prealpes du sud ewes.

J. Reprod. Fertil., **85**: 317-323.

BUNGARTZ, L. u. NIEMANN, H. (1994):

Assessment of the presence of a dominant follicle and selection of dairy cows suitable for superovulation by a single ultrasound examination.

J. Reprod. Fertil., **101**: 583-591.

BUSSE, T. (1995):

Untersuchungen über die Auswirkungen verschiedener Einflüsse auf die Spülergebnisse superovulierter Kühe beim Embryotransfer.

Diss. Vet. Med., Berlin.

CAHILL, R. u. MAULEON, P. (1980):

Influences of season, cycle and breed on follicular growth rates in sheep.

J. Reprod. Fertil., **58**:391-328.

CALLESEN, H.; GREVE, T.; HYTTEL, P. (1986):

Preovulatory endocrinology and oocyte maturation in superovulated cattle.

Theriogenology, **25**: 71-86.

CALLESEN, H.; GREVE, T.; CHRISTENSEN, F. (1987):

Ultrasonically guided aspiration of bovine follicular oocyte.

Theriogenology, **27**: 217 (Abst.).

CALLESEN, H.; GREVE, T.; HYTTEL, P. (1988):

Preovulatory evaluation of the superovulatory response in donor cattle.

Theriogenology, **30**: 477-488.

CAMBELL, B. K., McNEILLY, A. S.; BAIRD, D. T. (1990):
Episodic ovarian inhibin secretion is not due to LH-Pulses in anoestrus ewes.
J. Endocr., **123**: 173:179.

CAUBO, B.; DE VINNA, R. S.; TOMETTA, S. A. (1989):
Regulation of steroidogenesis in cultured porcine theca cells by growth factors.
Endocrinology, **125**, 321-326.

CHANNIG, C. P. u. KAMMERMAN, S. (1974):
Binding of gonadotropins to the ovarian cells.
Biol. Reprod. **10**: 179-198.

CHOUDARY, J. B.; GIER, H. T.; MARION, G. B. (1968):
Cyclic changes in the bovine vesicular follicles.
J. Anim. Sci., **27**: 468-471.

CHUPIN, D.; COMANOUS, Y.; PROCUREUR, R. (1984):
Antagonistic effect of LH on FSH-induced superovulation in cattle.
Theriogenology, **21**: 229 (Abst.).

COLE, H. H. u. GOSS, H. T. (1943):
The source of equine gonadotropin.
In: Essays in Biology in Honour of H. M. EVANS, 107 University of California Press, California.

CUSHMAN, R. A.; DESOUZA, J. C.; HEDGPETH, V. S.; BRITT, J. H. (1999):
Superovulatory Response of one Ovary is related to the micro-and macroscopic population of follicles in the contralateral ovary of the cow.
Biol. Reprod., **60**: 349.

CUSTER, E. E.; BEAL, W. E.; WILSON, S. J.; MEADOWS, A. W.; BERARDINELLI, J. G.; ADAIR, R. (1994):
Effect of melengesterol acetate (MGA) or progesterone-releasing intravaginal device (PRID) on follicular development, concentrations of estradiol-17 β and progesterone, and LH release during an artificially lengthened bovine estrous cycle.
J. Anim. Sci., **72**: 1282-1289.

DE LOOS, F. A.; BEVERS, M. M.; DIELMAN, S. J.; KRUIP, Th. A. M. (1991a):
Morphology of preovulatory bovine follicles as related to oocyte maturation.
Theriogenology, **35**: 527-535.

DE LOOS, F. A.; BEVERS, M. M.; DIELMAN, S. J.; KRUIP, Th. A. M. (1991b):
Follicular and oocyte maturation in cows treated for superovulation.
Theriogenology, **35**: 537-547.

DE LOOS, F. A.; ZEINSTRA, E.; BEVERS, M. M. (1993):
The effect of growth factors on in vitro bovine oocyte maturation.
J. Reprod. Fertil., **11**:64 (Abst.).

DIAZ, T.; MANZO, M.; TROCONIZ, J.; BENACCHIO, N.; VERDA, O. (1986):
Plasma progesteron levels during the estrous cycle of Holstein and brahman cows, carora type and cross-breed heifers.
Theriogenology, **26**: 419-432.

DIEKMAN, M. A.; O'CALLAGHAN, P.; NETT, T. M. ; NISWENDER, G. D. (1978):
Effect of prostaglandinF₂α on the numbers of LH receptors in ovine corpora lutea.
Biol. Reprod., **19**: 1010-1013.

DIELEMAN, S. J. u. BEVERS, M. M. (1987):
Effects of monoclonal antibody against PMSG administered shortly after the preovulatory LH surge on the time and number of ovulation in PMSG/PG-treated cows.
J. Reprod. Fertil., **81**: 533-542.

DIELEMAN, S. J.; BEVERS, M. M.; GIELEN, J. TH. (1987):
Increase of the number of ovulation in PMSG/PG-treated cows by administration of monoclonal anti-PMSG shortly after the endogenous LH peak.
Theriogenology, **27**: 222 (Abst.).

D'OCCHIO, M. J.; JILLELLA, D.; LIDSEY, B. R. (1999):
Factors that influence follicle recruitment, growth and ovulation during ovarian superovulation in heifers: Opportunities to increase ovulation rate and embryo recovery by delaying the exposure of follicles to LH.
Theriogenology, **51**: 9-13.

DÖCKE, F. (1994):
Veterinärmedizinische Endokrinologie.
Gustav-Fischer- Verlag Jena.

DONADSON, L. E. u. HANSEL, W. (1968):
Cystic corpora lutea and normal and cystic graafian follicles in the cow.
Aust. Vet. J., **44**: 304.

DONALDSON, L. E. (1985):
LH and FSH profiles at superovulation and embryo production in the cows.
Theriogenology, **23**: 441-447.

DRIANCOURT, M. A. (1991):
Follicular dynamics in sheep and cattle.
Theriogenology, **35**: 55-79.

DRAINCOURT, M. A.; THATCHER, W. W.; TERQUI, M; ANDRIEU, D.(1991):
Dynamics of ovarian follicular development in cattle during the estrous cycle, early pregnancy and in response to PMSG.
Domest. Anim. Endocrinol., **8**: 209-221.

DUFOUR, J. J.; WHITMORE, H. L.; GINTHER, O. J.; CASIDA, L. E. (1972):
Identification of the ovulating follicle by its size on different days of the estrus cycle in heifers.
J. Anim. Sci., **34**: 85-87.

DUFOUR, J. J. u. ROY, G. L. (1985):

Distribution of ovarian follicular populations in the dairy cow within 35 days after parturition.
J. Reprod. Fertil., **73**: 229-235.

EDMONDSON, A. J.; FISSORE, R. A.; PASHEN, R. L.; BONDURANT, R. H., (1986):

The use of ultrasonography for the study of the bovine reproductive tract. 1. Normal and pathological ovarian structures.

Anim. Reprod. Sci., **12**: 157-165.

ELDSEN, R. P.; NELSON, L. D.; SEIDEL, G. E. (1978):

Superovulating cows with FSH and PMSG.

Theriogenology, **9**: 17-26.

ENGLAND, B. G.; WEBB, R.; DOHMER, M. K. (1981):

Follicular steroidogenesis and gonadotrophin binding to ovine follicles during the oestrous cycle.

Endocrinology, **109**: 881-887.

ERICKSON, B. H. (1966a):

Development and senescence of the postnatal bovine ovary.

J. Anim. Sci. **25**: 800-805.

ERICKSON, B. H. (1966b):

Development and radio-response of the prenatal bovine ovary.

J. Reprod. Fertil., **10**: 97-105.

ERICKSON, B. H.; REYNOLDS, R. A.; MURPHREE, R. L. (1976):

Ovarian characteristics and reproductive performance in aged cows.

Biol. Reprod., **15**: 555-560.

ERICHSON, B. H.; NKATANI, A.; LING, N.; SHIMASAKI, S. (1992):

Cyclic changes in IGF-binding protein-4 messenger ribonucleic acid in the rat ovary.

Endocrinology, **130**: 233-636.

ESPEY, L. C. (1994):

Current status of the hypothesis that mammalian ovulation is comparable to an inflammatory reaction.

Biol. Reprod., **50**: 233-238.

EVANS, A. C.; ADAMS, G. P.; RAWLINGS, N. C. (1994):

Follicular and hormonal development in prepuberal heifers from 2 to 36 weeks of age.

J. Reprod. Fertil., **102** (2): 463-470.

EVANS, A. C. u. FORTUNE, J. E. (1997):

Selection of the dominant follicle in cattle occurs in the absence of difference in the expression of messenger ribonucleic acid for gonadotropin receptors.

Endocrinology, **138**: 2963-2971.

FALIN, L. I. (1969):

The development of genital glands and the origin of germ cells in human embryogenesis.
Acta. Anat. **72**: 195-232.

FIGUEIREDO, R. A.; BARROS, C. M.; PINHEIRO, O. L.; SOLER, J. M. P. (1997):

Ovarian follicular dynamics in nelore breed (*Bos indicus*) cattle.

Theriogenology, **47**: 1489-1505.

FEHRN, v. S.; DETTERER, J.; HAGERODT, A.; GLATZEL, P. S. (1991):

Einsatzmöglichkeit der Sonographie im Rahmen des Embryotransfers.

Proc. Tag. Dtsch. Arbeitgr. ET, Wahlstedt, 20-24.

FEHRN, v. S.; HAGERODT, A.; GLATZEL, P. S. (1990):

Synchron induzierte und stimulierte Follikelentwicklung am Rinderovar.

Reprod. Dom. Anim., **25**: 125-126.

FINDLAY, J. K. (1986):

The nature of inhibin and his use in the regulation of fertility and diagnosis of infertility.

Fertil. Steril., **46**: 770-783.

FINDLAY, J. K.; TSCHONIS, C. G.; STAPELS, L. D. (1986):

Inhibin secretion by the sheep ovary.

J. Reprod. Fertil., **76**: 751-761.

FINDLAY, J. K.; SAI, X.; SHAUKVSKI, L. (1990):

Role of inhibin related peptides as intragonadal regulators.

Reprod. Fertil. Dev., **2**: 205-218.

FORTUNE, J. E. u. HANSEL, W. (1985):

Concentration of steroids and gonadotropins in follicular fluid from normal heifers and heifers primed for superovulation.

Biol. Reprod., **32**: 1069-1079.

FORTUNE, J. E. (1986):

Bovine theca and granulosa cells interact to promote androgen production.

Biol. Reprod., **35**: 292-299.

FORTUNE, J. E. u. QUIRK, S. M. (1988):

Regulation of steroidogenesis in bovine preovulatory follicles.

J. Anim. Sci. (Suppl), **2**: 1-9.

FORTUNE, J. E.; SIRIOS, J.; QURIK, S. M. (1988):

The growth and differentiation of ovarian follicles during the bovine estrous cycle.

Theriogenology, **29**: 95-109.

FORTUNE, J. E.; SIRIOS, J.; TURZILLO, A. M.; LAVIOR, M. (1991):

Follicle selection in domestic ruminants.

J. Reprod. Fertil. (Suppl.), **43**: 187-198.

FORTUNE, J. E. (1994):

Ovarian follicular Growth and development in Mammals.
Biol. Reprod., **50**: 225-232.

GINTHER, O. J. u. PIERSON, R. A. (1984):

Ultrasonography of the bovine ovary.
Theriogenology, **21**: 471-483.

GINTHER, O. J.; KNOPF, L.; KASTLIC, J. P. (1989):

Ovarian follicular dynamic in heifer during early pregnancy.
Biol. Reprod., **41**: 247-254.

GINTHER, O. J.; KNOPF, L.; KASTELIC, J. P. (1989):

Temporal associations among ovarian events in cattle with two and three follicular waves.
J. Reprod. Fertil., **87**: 223-230.

GINTHER, O. J.; WILTBAK, M. C.; FRIKE, P. M.; GIBBONS, J. R.; KOT, K. (1996):

Selection of Dominant Follicle in Cattle.
Biol. Reprod., **55**: 1187-1195.

GINTHER, O. J.; KOT, K.; KULICK, L. J.; WILTBAK, M. C. (1997):

Sampling follicular fluid without altering follicular status in cattle: oestradiol concentrations early in a follicular wave.
J. Reprod. Fertil., **109**: 181-186.

GINTHER, O. J.; BERGFELT, D. R.; KULICK, L. J.; KOT, K. (1998):

Pulsatility of systemic FSH and LH concentrations during follicular-wave development in cattle.
Theriogenology, **50**: 507-519.

GLATZEL, P. S.; LAHLOU-KASSI, A.; STOLLA, A.; LEIDEL, W. (1980):

Oestrus synchronization in a herd of moroccan dairy cattle.
Anim. Res. and Development, **12**: 78-87.

GLATZEL, P. S.; LAHLOU-KASSI, A.; DEWULF, M. (1983):

Der Einsatz eines PGF_{2α}-A (Analogs) in Verbindung mit der k. B. bei Rindern im Besamungsbezirk Rabat-Temara, Marokko.
Ber. Münch. Tierärztl. Wschr., **40**: 482-486.

GLATZEL, P. S. u. HUSS, J. (1989):

Morphologische und endokrinologische Untersuchungen an Eierstockzysten des Rindes.
Fertilität, **5**: 228-232.

GLATZEL, P. S. u. SCHALLENBERGER, E. (1990):

Klinische und endokrinologische Untersuchung zur Ovarfunktion von Rindern mit Fruchtbarkeitssörungen.
Berl. Münch. Tiertärl. Wschr., **103**: 202-206.

GLATZEL, P. S. (1992):

Zur Problematik des zystischen Rinderovars: Morphologische, sonographische und endokrinologische Untersuchungen.

Tierärztl. Umschau, **47**: 72-76.

GLATZEL, P. S. (1997):

Zur Bedeutung von Biotechniken in der Fortpflanzungsbiologie und Veterinärmedizin.

Berl. Münch. Tierärztl. Wschr., **110**: 166-170.

GLATZEL, P. S. (1999):

Zur Aussagefähigkeit von Steroidhormonen im Kot von Rindern für deren Ovarfunktion.

Tierärztl. Prax. **27**: 36-40

GLATZEL, P. S.; BUSSE , T.; GÖRLACH, A. (1999):

Superovulation und Embryonenausbeute in Embryotransferprogrammen bei Milchrindern.

Tierärztl. Prax., **27**: 219-222.

GONG, J. P.; BRMLEY, T. A.; GUTIERRZ, C. G.; PETES, A. R.; PETERS, A. R.; WEBB, R. (1995):

Effect of chronic treatment with a gonadotropin-releasing hormone agonist on peripheral concentration of FSH and LH and ovarian function in heifers.

J. Reprod. Fertil., **105**: 263-270.

GOODMAN, A. L. u. HODGEN, G. D. (1983):

The ovarian triad of the primate menstrual cycle.

Recent Progress in Hormone Research. **134**: 11-18.

GRASSO, F.; GUILBAULT, L. A.; ROY, G. L.; MATTON, P; LUSSIER, J. G. (1989):

The influence of the presence of a dominant follicle at the time of initiation of a superovulatory treatment on superovulatory responses in cattle.

Theriogenology, **31**: 199 (Abst).

GRAY, B. W.; CARTEE, R. E.; STRINGFELLOW, D. A.; RIDDEL, M. D.; RIDDEL, K. P.; WRIGHT, J. C. (1992):

The effect of FSH-priming and dominant follicular regression on the superovulatory response of cattle.

Theriogenology, **37**: 631-639.

GREVE, T. (1976):

Egg transfer in the bovine: Effect of injecting PMSG on different days.

Theriogenology, **5**: 15-19.

GREVE, T.; CALLESEN, H.; HYTTEL, P. (1983):

Endocrine profiles and egg quality in the superovulated dairy cows.

Nord Vet. Med., **35**: 408-421.

GREVE, T.; CALLESEN, H.; HYTTEL, P. (1984):

Characterization of plasma LH-profiles in superovulated dairy cows.

Theriogenology, **21**: 237 (Abst.).

GRUNERT, E. (1979):

Zur Problematik der rektalen Ovarkontrolle beim Rind.
Prakt. Tierarzt, **60**: 13-18.

GUILBAULT, L. A.; GRASSO, F.; LUSSIER, J. G.; ROUILLIER, P.; MATTON, P. (1991):

Decreased superovulatory response in heifers superovulated in the presence of a dominant follicle.
J. Reprod. Fertil., **91**: 81-89.

GUILBAULT, L. A.; ROUILLIER, P.; MATTON, P.; GLEN CROSS, R. G.; BEARD, A. J.; KNIGHT, P. G. (1993):

Relationships between the level of atresia and inhibin contents (alpha subunit and alpha-beta dimer) in morphologically dominant follicles during their growing and regressing phases of development in cattle.

Biol. Reprod., **48**: 268-276.

HAHN, J. (1992):

Attempts to explain and reduce variability of superovulation.
Theriogenology, **83**: 269-275.

HANSEL, W. u. FORTUNE, J. E. (1978):

The applications of ovulation control.
In: Control of ovulation. CRIGHTON, D. B.; HAYNES, N. B.; FOXCROFT, G. R.; LAMMING, G. E. (Eds.).
, pp. 237-263. Butterworths, London.

HANSEL, H. u. COVEY, M. (1983):

Physiology of the estrous cycle.
J. Anim. Sci. **57** (Suppl. 2): 404-424.

HENDERSON, K. M.; MCNEILLY, A. S.; SWANSTON, I. A. (1982):

gonadotrophin and steroid concentrations in bovine follicular fluid and their relationship to follicle size.

J. Reprod. Fertil., **65**: 467-473.

HERNANDEZ, E. R.; ROBERTS, C. T.; LE ROITH, D.; ADASHI, E. Y. (1989):

Rat ovarian Insulin like growth factor (IGF1) gene expression in the rat ovary is confined to the granulosa cell selective: 5' untranslated mRNA variant representation and hormonal regulation. Endocrinology **121**: 597-603.

HILLIER, S. G. (1981):

Paracrine control in the ovaries.
Res. Reprod., 19, No. 4.

HIRSHFIELD, A. N. (1991):

Development of Follikels in the mammalian ovary.
Int. Rev. Cyto. **124**:43-101.

HUEH, A. J. W.; WELSH, T. H.; JONES, P. B. C. (1981):

Inhibition of ovarian and testicular steroidogenesis by epidermal growth factor.
Endocrinology, **108**: 2002-2004.

HUHTINEN, M; RAINIO, V.; AALTO, J.; BREDBAKA, P.; MÄKI-TANILA, A. (1992):

Increased ovarian responses in the absence of a dominant follicle in superovulated cows.
Theriogenology, **37**: 457-563.

HULSHOF, S. C.; FIGUEIREDO, J. R.; BECKER, J. F.; BEVERS. M. M. (1994):

Isolation of preantral follicles from foetal bovine ovaries.

Vet. Quart., **16**: 78-80

HUSS, J. (1991):

Morphologische und endocrinologische Befunde an Geschlechtesorganen von Schlachtrindern.
Diss. Vet. Med. FU-Berlin.

HYTTEL, P.; CALLESEN, H.; GREVE, T. (1986):

Ultrastructural features of preovulatory oocyte maturation in superovulated cattle.
J. Reprod. Fertil., **76**: 645-656.

HYTTEL, P.; GREVE, T.; CALLESEN, H. (1989):

Ultrastructural aspects of oocyte maturation and fertilization in cattle.
J. Reprod. Fertil. (Suppl.), **38**: 35-47

HYTTEL, P.; CALLESEN, H.; GREVE, T.; SCHMIDT, M. (1991):

Oocyte maturation and sperm transport in superovulated cattle.
Theriogenology, **35**: 91-108.

HYTTEL, P.; FAIR, T.; CALLESEN, H.; GREVE, T. (1997):

Oocyte maturation, capacitation and final maturation in cattle.
Theriogenology, **47**: 23-32.

INSKEEP, E. K. (1973):

Potential uses of prostaglandins in control of reproductive cycles of domestic animals.
J. Anim. Sci., **36**: 1149-1157.

IRELAND, J. J.; COULSON, P. B.; MURPHREE, R. L. (1979):

Follicular development during four stages of the estrous cycle of beef cattle.
J. Anim. Sci., **49**: 1261-1269.

IRELAND, J. J. u. ROCHE, J. F. (1982):

Development of antral follicles in cattle after prostaglandin-induced luteolysis: changes in serum hormones, steroid in follicular fluid, and gonadotropin receptors.
Endocrinology, **111**: 2077-2086.

IRELAND, J. J. u. ROCHE, J. F. (1983a):

Development of nonovulatory antral follicles in heifers: changes in steroids in follicular fluid and receptors for gonadotropins.
Endocrinology, **112**: 150-156.

IRELAND, J. J. u. ROCHE, J. F. (1983b):

Growth and differentiation of large antral follicles after spontaneous luteolysis in heifers: changes in concentration of hormones in follicular fluid and specific binding of gonadotropins to follicles.

J. Anim. Sci., **57**: 157-167.

IRELAND, J. J. u. ROCHE, J. F. (1987):

Hypotheses regarding development of dominant follicles during a bovine estrous cycle.
In Follicular Growth and Ovulation Rate in Farm Animals, Eds. by J. F. ROCHE and D' CALLAGHAN, Martinus Nijhoff, pp. 1-18.

JACKSON, P. S. u. FURR, B. J. A. (1983):

Ovulation control in heifers with prostaglandin and luteinizing hormone analogue under different conditions of management.

Research Vet. Sci., **34**: 182-187.

JENSEN, A. M.; GREVE, T.; MADEJ, A.; EDQUIST, L. E. (1982):

Endocrine profiles and embryo quality in the PMSG-PGF 2α treated cows.
Theriogenology, **18**: 33-44.

KÄHN, W. (1986):

Vorkommen und Wachstum von Gelbkörper mit Hohlraum während des Ovarzyklus bei Rindern und deren Hormonprofile.

Dtsch. tierärztl. Wschr., **93**: 475-480.

KÄHN, W. (1988):

Die Ultraschalldiagnostik in der Gynäkologie des Rindes; ihre Anwendung in Wissenschaft und tierärztlicher Praxis.

Habilitationsschrift, Tierärztliche Fakultät, Ludwig-Maximilians-Universität München.

KÄHN, W. (1989):

Die Entwicklung von Follikeln beim Rind; Veränderungen ihrer Anzahl und Größe während des Ovarialzyklus.

Berl. Münch. Tierärztl. Wschr., **102**: 44-49.

KANITZ, W.; MILDNER, H.; FRYMANN, U.; KANITZ, E.; SCHNEIDER, F.; BEKER, F. (1996):

Untersuchungen zum Ovulationszeitraum nach induzierter Luteolyse beim Rind in Abhängigkeit vom Zyklusstadium.

Züchtungskunde, **68**: 268-279.

CASTELIC, J. P.; KNOPF, L.; GINTHER, O. J. (1990):

Effect of day of day prostaglandin F 2α treatment on selection and development of the ovulatory follicle in heifers.

Anim. Reprod. Sci., **23**: 169-180.

KASTELIC, J. P.; MCCARTNEY, D. H.; OLDSON, W.O.; BARTH, A. D.; GARCIA, A.; MAPLETOFT, R. J. (1996):

Estrus synchronisation in cattle using estradiol, melengesterol acetate and PGF. Theriogenology, **46**: 1295-1303.

KAWAMATA, M. (1994):

Relationship between the number of small follicles prior to superovulatory treatment and superovulatory response in Holstein cows.

J. Vet. Med. Sci., **56**: 965-967.

KING, M. E.; KIRACOFE, G. H.; STEVENSON, J. S.; SCHALLES, R. R. (1982):

Effect of stage of the estrous cycle on the interval to estrous after PGF_{2α} in beef cattle. Theriogenology, **18**: 191-200.

KNOPF, L.; KASTELIC, J. P.; SCHALLENBERGER, E.; GINTHER, O. J. (1989):

Ovarian follicular dynamic in heifer: test of two-wave hypothesis by ultrasonically monitoring individual follicles.

Domes. Anim. Endocr., **6**: 111-119.

KNOPF, L. (1990):

Thrombozytenbestimmung sowie ultrasonographische Untersuchungen der Follikel- und Gelbkörperentwicklung während des Zyklus und der Frühgravidität beim Rind.

Diss. vet. med., München.

KO, J. C. H.; KASTELIC, J. P.; DEL CAMPO, M. R.; GINTHER, O. J. (1991):

Effects of a dominant follicle on ovarian follicular dynamics during the oestrous cycle in heifers.

J. Reprod. Fertil., **91**: 511-519.

KOCH, M. u. GLATZEL, P. S. (1990):

Zur Objektivierung von transrektal ermittelten Befunden am zyklischen Rinderovar.

Reprod. Dom. Anim., **25**: 116.

KRUIP, TH. A. M. u. DIELEMAN, S. J. (1985):

Steroid hormone concentration in the fluid of bovine follicles relative to size, quality and stage of the oestrous cycle.

Theriogenology, **24**: 395-408.

KRUIP, TH. A. M.; VAN BEDEN, TH. H.; DIELEMAN, S. J.; BEVERS, M. M. (1988):

The effect of estradiol-17β on nuclear maturation of bovine oocyte.

Proc. 11th Int. Cong. Anim. Reprod. And AI, **3**: 336 (Abst.).

LAHLOU-KASSI, A.; SCHAMS, D.; GLATZEL, P. S. (1984):

Plasma gonadotrophin concentrations during the oestrus cycle and after ovariectomy in two breeds of sheep with low and high fecundity.

J. Reprod. Fertil., **70**: 165-173.

LARISON, L. L. u. BALL, P. J. H. (1992):
Regulation of estrous cycle in dairy cattle: a review.
Theriogenology, **38**: 255-267.

LAURINCIK, J.; OBERFRANCE, M.; PIVOK, J.; GRAFENAU, P; KUBOVICOVA, E. (1992):
Characteristics of the cumulus-oocyte complex during the preovulatory period in superovulated heifers.
Vet. Med. (Parah), **37**: 141-147.

LAUNTER, M.; NOHNER, H. P.; HAHN, J.; HAHN, R. (1997):
Ist eine Punktions des dominanten Follikels bei Spenderkühen vor der Superovulationseileitung sinnvoll?.
Jahrestagung Arbeitsgemeinschaf Embryotransfer Deutschland, 19.-20. Juni, Neustadt a.d. Aisch.

LUSSIER, J. P.; MATTON, P.; DUFOUR, J. J. (1993):
Growth rates of follicles in the ovary of the cow.
J. Reprod. Fertil., **81**:301-307.

LUSSIER, J. P.; MATTON, P.; GUIBAULT, L. A.; MAPLETOFT, R. J.; CARRUTHERS, T. D. (1994):
Ovarian follicular development and endocrine responses in follicular-fluid-treated und hemi-ovarectomized heifers.
J. Reprod. Fertil., **102**: 95-105.

MACIEL, M.; GUSTAFSSON, H.; RODRINGUEZ-MARTINEZ, H. (1995):
superovulatory response in lactating cows with different follicular dynamics.
Zentralbl. Veterinärmed. A, **42**: 123-129.

MACMILLAN, K. L.; u. THATCHER, W. W. (1991):
Effects of an agonist of gonadotropin-releasing hormone on ovarian follicles in cattle.
Biol. Reprod., **45**: 883-889.

MANN, T. L.; McNEILLY, A. S.; BAIRED, D. T. (1989):
Source of inhibin secretion during the estrous cycle of the sheep.
J. Endocrin., **123**: 181-188.

MARION, G. B.; GIER, H. T.; CHOUDARY, J. B. (1968):
Micromorphology of the bovine ovarian follicular system.
J. Anim. Sci., **27**: 451-465.

MARTIN, T. L.; PRICE; C. A.; THIERY; J. C.; WELB, R. (1988):
Interaction between inhibin, estradiol and progesteron in the control of gonadotropin secretion in the ewe.
J. Reprod. Fertil. **82**: 319-328.

MARTIN, T. L.; FOGWELL, R. L.; IRELAND, J. J. (1991):

Concentrations of inhibins and steroids in follicular fluid during development of dominant follicles in heifers.

Biol. Reprod., **44**: 693-700.

MATTON, P.; ADELAKOUN, V.; COUTURE, Y.; DUFOUR, J. J. (1981):

Growth and replacement of the bovine ovarian follicles during the oestrous cycle.

J. Anim. Sci., **52**: 813-820.

MAURER, R. R.; ECHTERNKAMP, S. E.; WISE, T. H. (1989):

Ovarian responses to intramuscular or intravenous administration of prostaglandin F_{2α} in control and FSH-treated beef heifers.

J. Anim. Sci., **67**: 2075-2080.

MCDOWELL, C. M.; ANDERSON, L. G.; KINDER, J. E.; DAY, M. L. (1998):

Duration of treatment with progesterone and regression of persistent ovarian follicles in cattle.

J. Anim. Sci., **76**: 850-855.

McNATTY, K. P.; HUDSON, N.; GIBB, M.; BALL, K.; HENERSON, K. M., HEATH, D. A.; LUN, S.; KIEBOOM, L. E. (1985):

FSH influences follicle viability, oestradiol biosynthesis and ovulation rate in Romney ewes.

J. Reprod. Fertil., **75**: 121-1985.

MERZ, E. R.; HAUSER, E. R.; ENGLAND, A. G. (1981):

Ovarian function in cow: relationship between gonadotrophin binding to theca and granulosa and steroidogenesis in individual follicles.

J. Anim. Sci., **52**: 1957-1968.

MICHEL, G. (1983):

Kompendium der Embryologie der Haustiere.

3. überarbeitete Auflage, Gustav Fischer Verlag. Stuttgart.

MIHM, M. A.; BAGUISI, A.; BOLAND, M. P.; ROCHE, J. F. (1994):

Association between the duration of dominance of the ovulatory follicle and pregnancy rate in beef heifers.

J. Reprod. Fertil., **102**: 123-130.

MIHM, M. A.; BOLAND, M. P.; KNIGHT, P. G.; ROCHE, J. F. (1995):

Relationship between Gonadotrophins and follicular fluid oestradiol and inhibin during the loss of dominance of the first dominant follicle in beef heifers.

11e Reunion A.E.T.E.-Hannover, 8-9 September.

MIHM, M. A.; GOOD, T. H.; IRELAND, J. L.; IRELAND, J. J.; KNIGHT, P. G.; ROCHE, J. F. (1997):

Decline in serum follicle-stimulating hormone concentrations alters key intrafollicular growth factors involved in selection of the dominant follicle in heifers.

Biol. Reprod., **57**: 1328-1337.

- MIHM, M. A.; CURRAN, N.; HYTTEL, P.; KNIGHT, P. G.; BOLAND, M. P.; ROCHE, J. F. (1999):**
Effect of dominant follicle persistence on follicular fluid oestradiol and inhibin and on oocyte maturation in heifers.
J. Reprod. Fertil., **116**: 293-304.
- MILDNER, H. u. FREYMAN, U. (1992):**
Untersuchungen zur Luteolyse und Ovulation nach der Applikation von Prostaglandin F_{2α} allein sowie in Kombination mit Gonadotropin-Releasing-Hormone an verschiedenen Zyklustagen beim Rind.
Diss. Vet. Med., Leipzig.
- MOHAN, M. u. RAJAMAHENDRAN, R. (1998):**
Effect of unilateral ovarioectomy on follicular development and ovulation in cattle.
Theriogenology, **102**: 1059-1070.
- MOMNT, H. W. u. SEGUIN, B. E. (1982):**
Influence of day of estrous cycle on response to PGF_{2α} products implications for AI programs for dairy cattle.
Proc. 10th Inter. Cong. Anim. Reprod. and AI, Vol. III: 336.
- MONNIAUX, D.; CHUPIN, D.; SAUMANDE, J. (1983):**
Superovulatory response of cattle.
Theriogenology, **19**: 55-81.
- MONNIAUX, D.; MARIANA, J. C.; GIBSON, W. R. (1984):**
Action of PMSG on follicular population s in the heifer.
J. Reprod. Fertil., **70**: 243-253.
- MONNIAUX, D. u. PISSELET, C. (1992):**
Control of proliferation and differentiation of ovine granulosa cells by IGF-1 and Folicle stimulating hormone in vitro.
Biol. Reprod., **46**: 109-119.
- MONNIAUX, D.; MONGET, P.; BESANNRD, N.; HUET, C.; PISSELET, C. (1997):**
Growth factors and antral follicular development in domestic ruminant.
Theriogenology, **47**: 3-12.
- MORRIS, D. G.; McDERMOTT, M. G.; DISKIN, M. G.; MORRISON, C. A.; SWIFT, P. J.; SREENAN, J. M. (1993):**
Effect of immunization against synthetic peptide sequences of bovine inhibin alpha-subunit on ovulation rate and twin-calving rate in heifers.
J. Reprod. Fertil., **97**: 255-261.
- MÜLLER, F.; BACH, S.; BARTH, T.; EULENBERGER, K. (1982):**
Hormoanalytische Untersuchungen zur Ovulationsauslösung nach Brunstsynchroisation bei Kühen.
Tierhygiene Information **14**: 199-203.

MÜLLER, E. (1985):

Ultraschall als Untersuchungshilfsmittel in der Gynäkologie des Rindes.
Diss. Vet. Med. Hannover.

NATION, D. P.; BURKE, C. R.; RHODES, F. M.; MACMILLAN, K. L. (1999):

The inter-ovarian distribution of the dominant follicles is influenced by the location of the corpus luteum of pregnancy.
Anim. Reprod. Sci., **56** (3-4): 169-176.

NEUFELD, G.; FERRARA, N.; SCHWEIGERE, L.; MITCHELL, L.;

GOSPODAROWICS, D. (1987):

Bovine granulosa cells produce basic fibroblast growth factor.
Endocrinology, **121**: 597-603.

NISWENDER, G. D. u. NETT, T. M. (1988):

The corpus luteum and its control.

In: The physiology of reproduction, KNOBIL, E. und NEILL, J. (Eds.),
New York: Raven Press, 489-525.

NISWENDER, G. D.; JUENGEL, J. L.; MCGUIRE, W. J.; BELFFIORE, C. J.;

WILTBANK, M. C. (1994):

Luteal function: The Estrous cycle and early pregnancy.
Boil. Reprod., **50**: 239-247.

NKUUHE, J. R. u. MANNS, J. G. (1985):

Relationship between time of prostaglandin injection and ovulation in beef cattle.
Canadian.

J. Anim. Sci., **65**: 405-409.

ODDE, K. G. (1990):

A review of synchronization of estrus in postpartum cattle.

J. Anim. Sci., **68**: 817-830.

OLIVER, J. E.; AITMAN, T. J.; POWELL, J. F.; WILSON, C. A.; CLAYTON, R. N. (1989):

Isulin-like growth factor I gene expression in the rat ovary is confide to the graulosa cells of the developing follicles.

Endocrinology, **124**: 2671-2679.

O'SCHE, J. D.; CRAN, D. G.; HAY, M. F. (1980):

Fate of the theca interna following ovulation in the ewe.

Cell Tissue Res., **210**: 305-319.

PIERSON, R. A. u. GINTHER, O. J. (1984):

Ultrasonography of the bovine ovary.

Theriogenology, **21**: 495-504.

PIERSON, R. A. u. GINTHER, O. J. (1987):

follicular populations during the estrous cycle in heifers. II. Influence of right and left sides and intraovarian effect of the corpus luteum.

Anim Reprod. Sci., **14**: 177-186.

PIERSON, R. A. u. GINTHER, O. J. (1988):

Ultrasound imaging of the ovaries and uterus in cattle.

Theriogenology, **29**: 21-37.

PIETERSE, M. C.; VOS, P. L. A. M.; KRUIP, TH. A. M.; WURTH, Y. A. (1988):

Tansvaginal ultrasound guided follicular aspiration of bovine oocyte.

Theriogenology, **35**: 19-24.

PIETERSE, M. C., VOS, P. L. A. M.; KRUIP, TH. A. M.; WURTH, Y. A.; VAN

BENDEN, T. H.; WILLEMSE, A. H.; TAVERNE, M. A. M. (1992):

Repeated transvaginal ultrasound-guided ovum pick up in eCG treated cows.

Theriogenology, **37**: 273 (Abst.).

PRICE, C. A.; CARRIERE, P. D.; BAHTIA, B.; GROOME, N. P. (1995):

Comparison of hormonal and histological changes during follicular growth, as measured by ultrasonography, in cattle.

J. Reprod. Fertil., **103**: 63-68.

PURSLEY, J. R.; MEE, M. O.; WILTBANK, M. C. (1995):

Synchronization of ovulation in dairy cows using PGF_{2α} and GnRH.

Theriogenology, **44**: 915-923.

PURSLEY, J. R.; KOSOROK, M. R.; WILTBANK, M. C. (1997):

Reproductive management of lactating dairy cows using synchronization of ovulation.

J. Dairy Sci., **80**: 301-306.

QUIRK, S. M.; HICKEY, G. J.; FORTUNE, J. E. (1986):

Growth and regression of ovarian follicles during the follicular phase of the oestrous cycle in heifers undergoing spontaneous and PGF_{2α} induced luteolysis.

J. Reprod. Fertil., **77**: 211-219.

RAHE, C. H.; OWENS, R. E.; FLEEGER, J. E.; NEWTON, H. J.; HARMS, P.G.

(1980):

Pattern of plasma luteinizing hormone in the cyclic cow: dependence upon the period of the cycle.

Endocrinology, **107**: 498-503.

RAJAKOSKI, E. (1960):

The ovarian follicular system in sexually mature heifers with special reference to seasonal, cyclical and left-right variation.

Acta Endocr., Copenh. (Suppl.) **52**: 1-68.

RATH, D. (1993):

Featured article: Current status of ultrasound-guided retrieval of bovine oocytes.
Embryo Transfer Newsletter, **11**: 10-15.

RHODES, F. M.; FITZPATRIK, L. A.; ENTWISTELE, K. W.; KINDER, J. E. (1995):
Hormone concentrations in the caudal vena cava during the first ovarian follicular wave of the
oestrous cycle in heifers.
J. Reprod. Fertil., **104**: 33-39.

**RHODES, F. M.; PETERSON, A. J.; JOLLY, P. D.; McMILLAN, W. H.; DONNISON,
M.; LEDGARD, A.; PARTON, G.; HALL, D. R. (1997):**
Bovine ovarian follicle and oocyte characteristics after emergence of the first follicular wave.
Theriogenology, **47**: 149 (Abst.).

RIEPE, L (1997):

Der Einfluß der innerovariellen Regulation auf befruchtungsfähige Rinderoozyten im In-vitro-
Ansatz.
Diss. Vet. Med. FU-Berlin.

ROSENBERGER, G. (1990):

Die klinische Untersuchung des Rindes.
3. Auflage. Verlag Paul Parey, Berlin, Hamburg.

ROUILLIER, P.; MATTON, P; GUIBAULT, L; GRASSO, F; LUSSIER, J. (1990):
Influence of a dominant follicle atresia and estradiol release by ovarian follicles during
superovulation in cattle.
Theriogenology, **33**: 313 (Abst.).

ROUILLIER, P.; GUILBAULT, L. A.; LUSSIER, J. G.; MATTON, P. (1996):

Changes in morphological appearance and functional capacity of recruited follicles in cows
treated with FSH in the presence or absence of a dominant follicle.
Theriogenology, **46**: 1053-1061.

RÜSSE, I. (1987):

Differenzierung ovarIELler Follikelzellen beim Rind.
FDF, **16**:190-116.

SAIDUDDIN, S.; ROWE, R. F., CASIDA, L. E (1970):

Ovarian follicular changes following unilateral ovariectomy in the cow.
Biol. Reprod., **2**: 408-412.

SAUMANDE, J. u. CHUPIN, D. (1977):

Superovulation : A Limit to Egg Transfer in Cattle.
Theriogenology, **7**: 141-147.

SAUMANDE, J. (1980):

Concentrations of luteinizing hormone, oestradiol and progesterone in the plasma of heifers
treated to induce superovulation.
J. Endocr., **84**: 425-437.

SAVIO, J. D.; KEENAN, L.; BOLAND, M. P.; ROCHE, J. F. (1988):
Pattern of growth of dominant follicles during the oestrous cycle of heifers.
J. Reprod. Fertil. **83:** 663-671.

SAVIO, J. D.; BOLAND, M. P.; HYNES, N.; MATTIACCI, M. R.; ROCHE, J. E. (1990):
Will the dominant follicle of the estrous cycle of the heifers ovulate following luteolysis on day 7?
Theriogenology, **33:** 677-678.

SAVIO, J. D.; THATCHER, W. W.; MORRIS, G. R.; ENTWISTLE, K.; DROST, M.; MATTIACCI, M. R. (1993):
Effects of induction of low plasma progesterone concentrations with a progesterone-releasing intravaginal device on follicular turnover and fertility in cattle.
J. Reprod. Fertil., **98:** 77-84.

SCARAMUZZI, R. J.; TURNBALL, K. E.; NANCARROW, C. D. (1980):
Growth of graafian follicles in cows following luteolysis induced by the prostaglandin F₂α analogue, cloprostenol.
Aust. J. Biol. Sci., **33:** 63-69.

SCHALLENBERGER, E.; SCHÖNDORFER, A. M.; WALTERS, D. L. (1985):
gonadotrophins and ovarian steroids in cattle. I. Pulsatile changes of concentrations in the jugular vein throughout the oestrous cycle.
Acta Endocrin. (Suppl.), **108:** 312.

SCHAMS, D.; TOTH, G.; SCHALLENBERGER, E.; HOFMANN, B.; KARG; H. (1976):
Relationship between hormonal parameter and ovarian morphology as observed by pelviscopy during the oestrous cycle in cattle.
Proc. 8th Inter. Cong. Anim. Reprod. and A. I., Vol. III, 192-195.

SCHAMS, D.; MENZER, C. H.; SCHALLENBERGER, B.; HOFMANN, J.; HAHA, J.; HAHN, R; (1978):
Some studies on pregnant mare serum gonadotrophin (PMSG) and on endocrine response after application for superovulation in cattle.
In: Control of reproduction in the cows, Ed. by J. R. SREENAN (1978), Verlag Martinus Nijhoff, 122-142.

SCHAMS, D; KOLL, R.; CI, C. H. (1988):
Isulin-Like growth factor I stimulates oxytocin and progesterone production by bovine granulosa cells in culture.
J. Endocr., **116:** 97-100.

SCHNEEBELI, J. u. EGGENBERGER, E. (1985):
Klinische Untersuchungen über die Entwicklung auf dem Rinderovar.
Schweiz. Arch. Tierheilk., **127:** 213-230.

SCHNEEBELI, J. u. EGGENBERGER, E. (1986):

Vergleichende klinische Untersuchungen über das Wachstum palpierbarer Teriärfollikel in verschiedenen Stadien des Reproduktionszyklus beim Rind.
Schweiz. Arch. Tierheilk., **128**: 201-211.

SEGUIN, B. E. (1987):

Control of the reproductive cycle in dairy cattle.
Proc. Ann. Meet. Soc. Theriogenology, 300-308.

SEGUIN, B. E. (1997):

Ovsynch: A method for breeding dairy cows without doing heat detection.
The Bovine Practitioner, **31**: 11-14

SILVAN, G.; ILLERA, J. C.; ILLERA, M. (1993):

Determination of follicular fluid estradiol levels by enzyme-linked immunosorbent assay.
Steroids, **58**: 324-329.

SINGH, J.; PIERSON, R. A.; ADAMS, G. P. (1998):

Ultrasound image attribute of bovine ovarian follicles and endocrine and functional correlates.
J. Reprod. Fertil., **112**: 19-29.

SIRIOS, J. u. FORTUNE, J. E. (1988):

Ovarian follicular dynamics during the estrous cycle in heifers monitored by real time ultrasonography.
Biol. Reprod. **39**: 308-317.

SKINNER, M. K.; LOBB, D.; DORRINGTON, J. H. (1987a):

Ovarian thecal/interstitial cells produce an epidermal growth factor like substance.
Endocrinology, **121**: 1892-1899.

SKINNER, M. K.; KESKI OJA, J.; OSTEEN, K. G.; MOSES, H. L. (1987b):

Ovarian thecal cells produce transforming growth factor β which can regulate granulosa cell growth.
Endocrinology, **121**: 786-792.

SPICER, L. J.; LEUNG, K.; CONVEY, E. M; GUNTHER, J.; SCHORT, R. E.; TUKER, H. A. (1986):

Anovulation in postpartum suckled beef cows. I. Associations among size and numbers of ovarian follicles, uterine involution, and hormones in serum and follicular fluid.
J. Anim. Sci., **62**: 734-741.

SPICER, L. J. u. ECHTERNKAMP, S. E. (1986):

Ovarian follicular growth, function and turnover in cattle: a review.
J. Anim. Sci., **62**: 428-451.

SPICER, L. J. u. APLIZOR, E. (1993):

Effect of insulin, insulin like growth factor I and gonadotrophins on bovine granulosa cell proliferation, progesteron production, estradiol production and (or) insulin-like growth factor I production in vitro.

J. Anim. Sci., **71**: 1232-1241.

STAGMILLER, R. B. u. ENGLAND, B. G. (1982):

Follculogenesis in the bovine.

Theriogenology, **17**: 43-52.

STAGMILLER, R. B.; ENGLAND, B. G.; WEBB, R.; SHORT, R. E.; BELLOWS, R. A. (1982):

Estradiol secretion and gonadotropin binding by individual follicles during estrus.

J. Anim. Sci., **55**: 1473-1482.

STARCK, D. (1975):

Embryologie. Keimzellen und Keimzellenbildung.

3. Auflage, Georg Thieme Verlag Stuttgart.

STEVENSON, J. S.; SCHMIDT, M. K.; CALL, E. P. (1984):

Stage of estrous cycle, time of insemination and seasonal effects on estrous and fertility of Holstein heifers after PGF 2α .

J. Dairy Sci., **67**: 1798-1805.

STOCK, A. E. u. FORTUNE, J. E. (1993):

Ovarian follicular dominance in cattle: Relationship between prolonged growth of the ovulatory follicle and endocrine parameters.

Endocrinology, **132**: 1108-1118.

STOCK, A. E. u. STOLLA, R. (1995):

Der dominante Ovarfollikel beim Rind-Physiologische Zusammenhänge und praktische Bedeutung.

Tierärztl. Umschau, **50**: 543-550.

STOCK, A. E.; ELLINGTON, J. E.; FORTUNE, J. E. (1996):

A dominant follicle does not affect follicular recruitment by superovulatory doses of FSH in cattle but can inhibit ovulation.

Theriogenology, **45**: 1091-1102

STOLLA, R. u. HIMMER, B. (1980):

Probleme bei rektaler Untersuchung der Ovarien.

Prakt. Tierarzt, **61**: 9-12.

STUBBINGS, R. B. u. WALTON, J. S. (1995):

Effect of ultrasonically-guided follicle aspiration on estrous cycle and follicular dynamics in Holstein cows.

Theriogenology, **43**: 705-712.

SUNDERLAND, S. J.; CROWE, M. A.; BOLAND, M. P.; ROCHE, J. F.; IRELAND, J. J. (1994):

Selection, dominance and atresia of follicles during the oestrous cycle of heifers.
J. Reprod. Fertil., **101**: 547-555.

SUNDERLAND, S. J.; KNIGHT, P. G.; BOLAN, M. P.; ROCHE, J. F.; IRELAND, J. J. (1996):

Alteration in intrafollicular level of different molecular mass forms of inhibin during development of follicular- and luteal-phase dominant follicles in heifers.
Biol. Reprod., **54**: 453-462.

TABAN, T. Y. u. HANN, R. C. (1984):

Synchronized estrus and subsequent conception in dairy heifers treated with prostaglandin F_{2α}. I. Influence of stage of cycle at treatment.
J. Anim. Sci., **58**: 805-811.

THATCHER, W. W.; DROST, M.; SAVIO, J. D. (1993):

New clinical uses of GnRH and its analogues in cattle.
Anim. Reprod. Sci., **33**: 27-49.

TOTH, G. (1977):

Pelviskopische Beobachtungen am Ovar während des Brunstzyklus beim Rind:
Zusammenhänge zwischen Follikelwachstum und hormonellen Parameter.
Diss. Vet. Med., München.

TSONIS, C. G.; CARSON, R. S.; FINDLAY, J. K. (1984):

Relationships between aromatase activity, follicular fluid oestradiol beta and testosterone concentrations, and diameter and atresia of individual ovine follicles.
J. Reprod. Fertil., **72**: 153-163.

TURZILLO, A. M. u. FORTUNE, J. E. (1990):

Suppression of the secondary FSH surge with bovine follicular fluid is associated with delayed ovarian follicular development in heifers.
J. Reprod. Fertil., **89**: 643-653.

UMBAUGH, R. E. (1949):

Superovulation and Ovum Transfer in cattle.
Amer. J. Vet. Res., **10**: 295-305.

VAN DEN HURK, R.; BEVERS, M. M.; BECKERS, J. F. (1997):

In vivo and in vitro development of preantral follicles.
Theriogenology, **47**: 73-82.

VAN STRAATEN, H. (1996):

Untersuchungen zum Einsatz von Gonadotropin-Releasing Hormon nach Brunstsynchronisation mit Prostaglandin F_{2a} in einer Milchvieherde mit Fruchtbarkeitsstörungen unter Berücksichtigung labordiagnostischer und klinischer Parameter.
Diss. Vet Med., FU-Berlin.

VILLA-GODOY, A.; IRELAND, J. J.; WORTMANN, J. A.; AMES, N. K.; HUGHES, T. L.; FOGWELL, R. L. (1985):

Effect of ovarian follicles on luteal regression in heifers.

J. Anim. Sci., **60**: 519-527.

VOS, P. L. M. M.; DE LOOS, F. A. M.; PIETERSE, M. C.; BEVERS, M. M.; TAVERNE, M. A. M.; DIELEMAN, S. J. (1994):

Evaluation of transvaginal ultrasound-guided follicle puncture to collect oocytes and follicular fluids at cosutive times relative to the preovulatory LH surge in eCG/PG-treated cows.

Theriogenology, **41**: 829-840.

WALTER, D. L. u. SCHALLENBERGER, E. (1984):

Pulsatile secretion of gonadotropins, ovarian steroids and ovarian oxytocin during the periovulatory phase of the oestrous cycle in the cow.

J. Reprod. Fertil., **71**: 503-512.

WALTON, J. S.; VEENHUIZEN, L. P.; KING, G. J. (1987):

Relationships between time of day, estrous behavior and the preovulatory luteinizing hormone surge in Holstein cows after treatment with Cloprostenol.

J. dairy Sci., **70**: 1652-1663.

WANG, X. N. u. GEREENWALD, G. S. (1993):

Hypophysectomy on the cyclic mouse. I. Effects on folliculogenesis, oocyte growth and FSH and hCG-receptors.

Biol. Reprod., **48**: 585-594.

WATTES, T. L. u. FUGUAY, J. W. (1985):

Response and fertility of dairy heifers following injection with prostaglandin F_{2α}.

J. Dairy Sci., **67**: 1798-1805.

WEBB, R. u. ENGLAND, D. G. (1982):

Relationship between LH receptor concentrations in theca and granulosa cells and in vivo and vitro steroid secretion of ovine follicles during the preovulatory period.

J. Reprod. Fertil., **66**: 169-180.

WILSON, J. M.; JONES, A. M.; MILLER, D. R. (1990):

Influence of a dominant follicle on the superovulatory response.

Theriogenology, **33**: 349 (Abst.).

WILTBANK, J. N.; INGALLS, J. E.; ROWDEN, W. W. (1961):

Effects of various forms and levels of estrogens alone or in combination with gonadotropins on the estrous cycle of beef cattle.

J. Anim. Sci., **20**: 341-346.

WILTBANK, J. N; ZIMMERMAN, D. R.; INGALLS, J. E.; ROWDEN, W. W. (1965):

Use of progestational compounds alone or in combination with estrogen for synchronization of estrus.

J. Anim. Sci., **24**: 990-994.

WILTBANK, J. N. (1997):

How information of hormonal regulation of the ovary as improved understanding of timed breeding programs.

Proc. Ann. Meet. Soc. Theriogenology, 83-97.

WISE, T.; SUSS, U.; STRANZINGER, G.; WUTHRICH, K.; MAURER, R. R. (1994):

Cumulus and oocyte maturation and in vitro and in vivo fertilization of oocytes in relation to follicular steroids, prolactin, and glycoaminoglycans throughout the estrous period in superovulated heifers with a normal LH surge, no detectable LH surge, and progestin inhibition of LH surge.

Domest. Anim. Endocrinol., **11**: 59-86.

WITSCHI, E. (1948):

Migration of germ cells of human embryos from the yolk sack to the primitive gonadal folds.
Contrib. Embryol, 32.

WOLFSDORF, K. E.; DIAZ, T.; SCHMITT, E. J. E.; THATCHER, M. J.; DROST, M.; THATCHER, W. W. (1997):

The dominant follicle exerts an interovarian inhibition on FSH-induced follicular development.

Theriogenology, **48**: 435-447.

YADAV, M. C.; LESLIE, K. E.; WALTON, J. S. (1985):

The onset and duration of ovulation in superovulated beef heifers.

Theriogenology, **23**: 237(Abst).

YING, S. Y.; BEKER, A.; LING, L.; VENO, N.; GALLEMIN, R. (1988):

Inhibin and β -type transforming growth factor have opposite modulating effect of the follicle.
Biochem. Res. Commun., **136**: 969-975