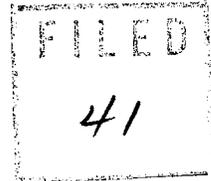


EMBRYO TRANSFERS: Nonsurgical embryo transfers
MISSOURI VETERINARY MEDICAL BOARD: in animals involves acts which
VETERINARIAN: constitute the practice of
VETERINARY MEDICINE: veterinary medicine and requires
knowledge of veterinary medicine
and such acts may only be performed in Missouri by one who is licensed
by the Missouri Veterinary Medical Board under Chapter 340, RSMo 1978
and Supp. 1984, unless such person is exempt from such licensing
requirement by Section 340.020, RSMo 1978, or any other applicable
exemption from Chapter 340, RSMo 1978 and Supp. 1984.

March 21, 1985

OPINION NO. 41-85

Carl M. Koupal, Jr., Director
Department of Economic Development
Post Office Box 1157
Jefferson City, Missouri 65102



Dear Mr. Koupal:

This opinion is in response to a question posed by the Missouri Veterinary Medical Board on your behalf asking:

Whether the practice of embryo transfer in animals is the practice of veterinary medicine and therefore falls under the Missouri Veterinary Practice Act, Chapter 340, RSMo.

As we understand it, embryo transfer is the art of removing a fertilized ovum from the reproductive tract of a genetically superior animal (the donor) and the transfer of the ovum to the reproductive tract of an animal usually of the same species and of lesser genetic quality (the surrogate) for gestation and birth. Embryo transfers may be performed on all types of domestic animals, zoo animals, and endangered species, but are primarily performed on cattle, at this time. It is our understanding that the Missouri Veterinary Medical Board is primarily concerned with nonsurgical embryo transfers.¹ Such nonsurgical embryo transfers may include the following steps: (1) the administration of drugs to the donor animal to induce superovulation (the

¹It is understood that surgical embryo transfers constitute the practice of veterinary medicine.

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production of more than one egg in the ovary at one time); (2) the administration of hormones to induce oestrus synchronization between the donor and surrogate animals (this insures that the animals are in heat at the appropriate times); (3) artificial or natural insemination of the donor animal with genetically superior semen, and, hopefully, the formation of embryos; (4) administration of an anesthetic to the donor and surrogate animals prior to the collection procedure; (5) sterilization of various instruments; (6) dialation of the cervixes of the donor and surrogate animals through the use of a cervical dialation rod; (7) insertion of the collection apparatus through the cervix of the donor animal into the uterine horn; (8) palpation of the ovaries; (9) loading of the embryo into a straw in the collection apparatus; (10) the administration of antibiotics to and evaluation of the embryo; (11) the transfer of the embryo to the surrogate animal; and (12) the administration of antibiotics to the surrogate and donor animals.

In part, Section 340.020, RSMo 1978,² makes it unlawful for any person not licensed as a veterinarian to practice "veterinary medicine" or to do any act which requires knowledge of "veterinary medicine" for valuable consideration, with certain exceptions not considered here.

Section 340.010(3) states:

When used in this chapter, the following terms shall mean:

* * *

(3) "Veterinary medicine", the practice of alleviating, rectifying, curing or preventing any injury, disease, deformity, or physical condition of animals, other than human beings and shall include the diagnosing of any affliction, the dispensing or administration of any medicine, appliance, treatment or surgery, or the advising, recommending or prescribing the administration or use of any medicine, appliance, treatment, course or

²All statutory references are to RSMo 1978, unless otherwise indicated.

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program of treatment, or operation on any such animal.

Section 340.060.3, RSMo Supp. 1984, enumerates the subjects applicants for veterinary licenses must be tested over and includes: (1) anatomy, including histology and embryology; (2) physiology and biochemistry; (3) bacteriology and immunology; (4) pathology and diagnosis; (5) parasitology; (6) medicine, therapeutics, pharmacology; (7) surgery; (8) obstetrics; (9) sanitation, hygiene, meat and milk inspection; (10) standards of professional conduct and ethics; and (11) epidemiology and regulatory veterinary medicine.

Section 340.060.4, RSMo Supp. 1984, requires applicants for veterinary licenses to be subjected to practical examinations, including the handling and restraint of cattle, physical examinations of cattle, diagnosis and treatment of cattle disease, and examinations of cattle for pregnancy.

We believe that subsections 3 and 4 of Section 340.060, RSMo Supp. 1984, enumerate the "knowledge of veterinary medicine" referred to in Section 340.020.

The definition of "veterinary medicine" includes the dispensing or administration of any medicine, appliance, treatment, or surgery or the advising, recommending or prescribing the administration or use of any medicine, appliance, treatment, course or program of treatment, or operation on any animal. Accordingly, we conclude that the performing of nonsurgical embryo transfers in animals constitutes the practice of veterinary medicine and requires knowledge of veterinary medicine. This is in accord with an opinion of the Georgia Attorney General, dated November 29, 1984.

We are aware that the procedure involved in such embryo transfers may take place over an extended period of time and involves some procedures which, if performed independently, may not constitute the practice of veterinary medicine. Clearly, however, the embryo transfer procedure, considered as a whole, does involve practices which may only be performed by licensed veterinarians.

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Conclusion

It is the opinion of this office that nonsurgical embryo transfers in animals involve acts which constitute the practice of veterinary medicine and requires knowledge of veterinary medicine and such acts may only be performed in Missouri by one who is licensed by the Missouri Veterinary Medical Board under Chapter 340, RSMo 1978 and Supp. 1984, unless such person is exempt from such licensing requirement by Section 340.020, RSMo 1978, or any other applicable exemption from Chapter 340, RSMo 1978 and Supp. 1984.

Very truly yours,

William L. Webster

WILLIAM L. WEBSTER
Attorney General