Local

THE BATTALION Page 5

# Embryo transfers successful but costly

**By WAYNE COOK** 

Battalion Reporter A procedure involving superovulation and embryo transfer has revolutionized animal reproduction, and it is the basis for a growing industry, a Texas A&M University animal researcher says. Dr. Duane C. Kraemer, a profes-

sor of veterinary physiology and animal science at Texas A&M, and colleagues performed the world's first embryo transfers on baboons, dogs and cats.

The technique begins by treating a donor female with hormones to cause expulsion from the ovary of numerous ova instead of the usual one ovum. The donor is then inseminated, most often artificially, to fertilize the eggs. And within a week, the resulting embryos are removed nonsurgically by flushing the uterus with a special fluid. The embryos are then transferred to the uterus of the host female the same way they were recovered.

This technique is used primarily to increase the reproductive rate of valuable animals, Kraemer said. Genetic progress is slowed by the low reproductive rate of most animals.

"I don't know of any species in which embryo transfers have not worked if attempted with determination, Kraemer said

Embryo transfer has been successful in 15 or 16 different species of animals including baboons. The first embryo transfer occurred with rabbits 90 years ago in England.

The success rate of the transfers varies from one species to another, Kraemer said. Embryo transfers are done most often with cattle, where 60 percent of the embryos implanted result in calves. When hormones are given to the donor, three to four calves result per collection of the embrvos

In North America alone, about 17,000 pregnancies were produced in cows by superovulation and embryo transfer in 1979. But the expense of conducting

embryo transfers is a major draw-back. Transfer units currently charge approximately \$2,000 for each calf produced. Some believe the offspring should be worth at least \$4,000 to be profitable, Kraemer said.

'The price makes it (embryo transfer) impractical for common animals," Kraemer said. "But that's OK, we shouldn't be reproducing anything but the best.

The technique of transferring embryos may soon be applied to hu-mans, Kraemer said. Although he is not involved with this area, he has discussed it with Chicago surgeon Dr. Randolph W. Seed, who plans to transfer the first human embryo by 1982.

The results of embryo transferring may be great, including replenishing species that were once endangered and, eventually, a healthier animal population.

Only

After 5 p.m.

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#### Future regents approved

Fund should stay same? the re-appointment of Alton Bowen

"How about excellence in educa-tion at some 23 other other institu-

tions such as Stephen F. Austin and

Sam Houston State College," asked

The Legislature should bring

Sen. Roy Blake, D-Nacogdoches.

forth a plan to bring forth funds to

make those institutions excellent,'

McKenzie said. "I don't think you

should steal from one to give to the

tee, "I don't know all I need to know

Richardson told the subcommit-

other

TODAY LAST DAY!

about that yet.

United Press International AUSTIN — A Senate subcommittee today approved Gov. Bill Clements' appointment of three Texas A&M graduates to the Board of Re-gents of their alma mater. left for the purpose of excellence in education at the University of Texas and Texas A&M.

The appointments now go the Senate for confirmation.

The three prospective new regents are businessman Harvey Roberts Bright of Dallas, attorney William A. McKenzie of Dallas, and oil and gas operator Joe C. Richard-

son Jr., of Amarillo. Sen. Chet Brooks, D-Pasadena, asked the three appointees how they feel about spreading the endowment of the Permanent University Fund among other institutions in the Texas A&M and University of Texas systems

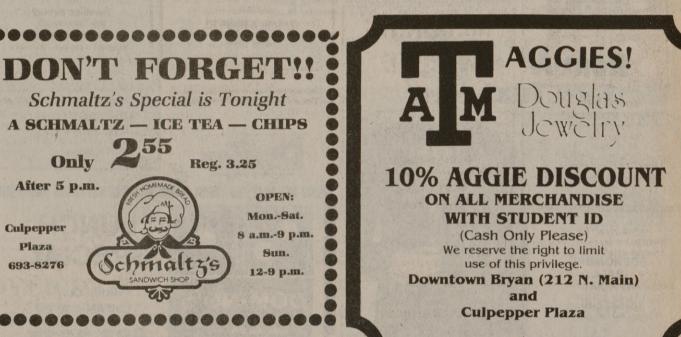
'I favor spreading the PUF funds

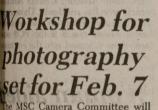
through the system requirements," Bright said. McKenzie said he agreed with Bright and said that "PUF should be

as state commissioner of education. Bowen said the teaching of the fundamentals of education - reading, writing and arithmatic — is the most important problem facing Texas schools. He also said he favors competency tests for teachers, before they begin their teacher education and again before they are certified to teach.

## Save energy a very bright idea

The subcommittee also approved





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Richard Moreland, a continuing education student, flushes a

cow with saline solution during a practice embryo collection at Dr. Duane C. Kraemer's embryo transfer lab. Moreland is assisted and instructed here by Diego Barrios (hands).

nor "Zanibar," a photo competi-aworkshop, on Feb. 7, from 9 1.1 p.m. in Room 321 of the Phy-i Building. The workshop will three sessions with four speak-

entgreff Graphics in San Antonio, Il discuss black and white photo-

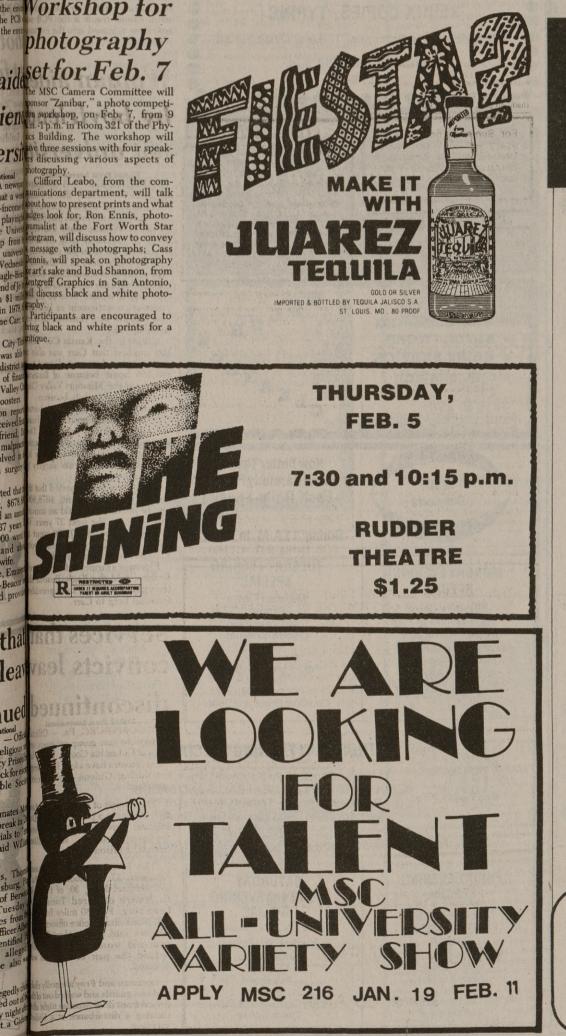


Photo by Linda Warinner

# While it's still free.

Jeni Malara, Student "I had C's in high school. After Evelyn Wood Reading Dynamics, I was able to maintain an A average."



Chris Walsh. Engineering "It's boring to read the way most people are taught. This way, you look at a page of print-you see the whole page. It's great!"

John Futch, Law Student With 60 briefs a week, the average student takes all week to prepare for class. In an evening, I'm finished."

Jim Creighton,

Teacher 'It's easy. Once you know how to do it, it's

**Richard St. Laurent**, 'I was skeptical, but now I'm reading around 2300 words a minute. Puts you that much ahead of everyone else.

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### **TODAY 7:30 P.M. Hillel Jewish Student Center** 800 Jersey @ Dexter Texas A&M Campus **EVELYN WOOD READING DYNAMICS** certified by **Texas Education Agency**

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