The ARBL serves as stewards for hundreds of animals including horses, bison, camels, cattle, goats, llamas, pigs, and sheep and, with its state-of-the-art Equine Reproduction Laboratory (ERL), houses numerous laboratories and service centers including:

- Mare, stallion, and foaling clinical services
- Assisted reproductive technologies in horses, cattle, and bison
- Reproductive endocrinology diagnostics
- Cryopreservation services
- Morphological and electron microscopy services
- Small and large animal care and facilities

The Animal Reproduction and Biotechnology Laboratory (ARBL) at Colorado State University’s Foothills Campus is a world-renowned center dedicated to advancing the health of animals and humans through reproductive science research, education, clinical service, and outreach. The ARBL’s mission is to excel in the discovery, translation, and dissemination of knowledge in reproductive sciences and biotechnologies at local, national, and international levels.
EDUCATION

Tomorrow’s scientists must be innovative critical thinkers. Because the ARBL is involved with basic, applied-translational, and clinical research, and has strong relationships with biotechnology companies and industries, students are trained to think globally.

• The ARBL provides classroom coursework and experiential research experiences at the undergraduate, graduate, postdoctoral, and professional veterinary levels.

• In addition to its research-based master’s, doctorate, DVM resident, and postdoctoral degree programs, the ARBL offers a professional master’s degree in biomedical sciences with a focus on assisted reproductive technologies (ART). The ART program includes extensive laboratory instruction and real-world experience and is the first program of its kind in the U.S.

• The ERL’s long-standing offerings of outstanding short courses and continuing education in equine reproduction are tailored to meet the needs of equine professionals and veterinarians.

SEMINARS

The ARBL hosts seminars every Monday at 4 p.m. during the fall and spring semesters, in addition to the annual Niswender Lecture in Reproductive Technology and the Squires Lecture in Equine Reproduction. All seminars are open the public.

Rocky Mountain Reproductive Sciences Symposium

This public conference, developed and hosted by the ARBL, typically hosts 100 attendees. It was launched in 2008 to foster regional interests in various aspects of reproductive sciences and to provide a forum for trainees to interact and exchange ideas.

ARBL’s research and clinical teams focus on solving reproductive issues in four focal groups:

THE SPERM, EGG, AND EMBRYO DEVELOPMENT GROUP focuses on gamete and embryo biology, cryopreservation, reproductive toxicology, human and animal reproductive medicine, and wildlife conservation.

THE HEALTHY BABY/HEALTHY MOTHER GROUP focuses on pregnancy outcomes and offspring health, including managing embryo mortality, intrauterine fetal growth restriction, the impact of maternal obesity and other maternal metabolic and immunological stressors on fetal development, and postnatal and adult onset of diseases such as diabetes and cardiovascular disease.

THE REPRODUCTIVE NEURO-ENDOCRINOLOGY GROUP focuses on clarifying how the brain and pituitary integrate diverse signals (such as metabolic condition, obesity, ovarian steroids, stress, and season) that lead to fertility and infertility. Understanding these neuroendocrine mechanisms will help yield new therapeutic targets for fertility regulation.

THE TRANSLATIONAL REPRODUCTIVE BIOTECHNOLOGY GROUP focuses on clinical endocrinology to develop technologies to better manage fertility and reproduction in animals and humans. Methods of contraception are also being developed, particularly for use in wildlife populations.
GIVING TO THE ARBL
The ARBL welcomes support to help foster the world-class research and educational opportunities that make it a leading reproductive research institution.

FELLOWSHIPS FOR EDUCATION & RESEARCH
ARBL scholarships and fellowships support students at all levels of study—undergraduate, graduate, postdoctoral, and DVM—training the next generation of reproductive scientists.

FACULTY RESEARCH
Donations to any of the ARBL research focal areas allows faculty to continue making innovative advances in reproductive science and biotechnology.

RENOVATIONS
Contributions towards facilities will help with expansion and remodeling to accommodate growth, change, and new directions for the ARBL.

PROFESSORSHIPS & ENDOWED CHAIRS
Professorships and endowed chairs provide support for, and assist in recruiting, exceptional faculty, allowing the ARBL to continue advancing education and research initiatives.

To support any of the above initiatives, visit advancing.colostate.edu/cvmbs/bms/give or call 970-491-3507