



COLLEGE OF AGRICULTURE AND LIFE SCIENCES
SCHOOL OF ANIMAL SCIENCES
VIRGINIA TECH.

Hands-On and Laboratory Dairy Research Opportunity

Dr. Rebecca Cockrum's Lab is looking for 10-15 undergraduate students to help with a project researching the effects of antibody supplements on pre-weaned Jersey calf health and immune function.

This project will begin mid-September and continue through December 2022. This project collaborates with a local dairy farm and uses their animals. Jersey dairy calves are enrolled at birth and remain on the project until 60 days of age. We will travel to the farm (1 hour away) to collect all data. Transportation is provided.

Undergraduate students will assist in collecting blood samples, weighing calves, collecting samples of milk and also assist with sample processing in the lab. Blood samples will be collected from calves at 48-72 hours, 14 days and 60 days of age. Once per week, we will travel to the farm to weigh all calves, collect height measurements and collect a sample of the calves' milk. In the lab, students will assist with processing blood for white blood cell counts and flow cytometry. Milk samples will be prepared for component analysis. Timing of visits to the farm are flexible and you can expect each farm visit to take 3-4 hours roundtrip. Laboratory time is also flexible and is for 1 hour min. A minimum of 1 shift at the farm and laboratory per week is required.

Required Qualifications:

- Willingness to learn new skills
- Hard worker & flexible schedule
- Able to work a minimum of 1X per week on farm & 1X in lab
- Willing to work with dairy calves

Preferred Qualifications (not required):

- Large animal experience
- Laboratory experience (basic)
- IACUC training completed

This project is an excellent opportunity to gain both hands-on experience working with large animals as well as basic laboratory experience. You will learn new concepts, skills and techniques related to large animal handling and lab techniques. There will be ample opportunities for animal experience throughout the project. This experience is un-paid, however, undergraduate researchers from our lab will develop skills & knowledge to help with their career and the opportunity for reference letters for veterinary or graduate school.

If interested, please send an email outlining your interest, your school and work schedule and a CV/resume to Kayla Alward (kalward@vt.edu).

Thank you!!