**Undergraduate Research Opportunity (WILD 490R): Movement ecology of prairie dogs and black-footed ferrets.**

The Becker Lab is looking for 2 upper-level undergraduate students who are interested in research opportunities for course credit in Spring 2025 to contribute to our project on the movement ecology of prairie dogs and the endangered black-footed ferret. The students will work with our team on our ongoing efforts to integrate advanced wildlife tracking technologies into research, management, and conservation efforts for these important grassland species. The project is being led by PhD students Itai Namir and Jesse Boulerice. The students will primarily work with both PhD students but will also be overseen by Justine Becker.

Prairie dogs are considered a keystone species in grassland ecosystems by providing important habitat and a source of food to a variety of species, including black-footed ferrets. Black-footed ferrets are among the most endangered species in North America with estimates suggesting that less than 400 individuals currently occur in wild populations reintroduced throughout the historical ranges of the species. Due to their semi-fossorial behaviors, prairie dogs and black-footed ferrets are difficult to study and many components of their natural history remain poorly understood, especially as it relates to fine-scale movements and behaviors during time spent underground. Using a combination of advanced wildlife tracking technologies, this project aims to validate movement data collected by transmitters and sensors attached to prairie dogs and black-footed ferrets with video footage of their movements and behaviors while wearing the transmitters.

The primary responsibilities of the students will be assisting with research tasks and data processing throughout the Spring semester in 2025, primarily consisting of annotating movements and behaviors of prairie dogs and black-footed ferrets recorded in camera traps and surveillance videos. The research will take place on campus. The students will also have the opportunity to complete a research project designed to quantify the behavior of prairie dogs and/or black-footed ferrets using video footage.

For more information or to express your interest in the research opportunity, please contact Itai Namir (itainamir@montana.edu), Jesse Boulerice ([jesse.boulerice@montana.edu](jesse.boulerice%40montana.edu)), or Justine Becker (justine.becker1@montana.edu) with the subject line “Prairie dog and black-footed ferret research opportunity”.