# PH.D. IN HUMAN BIOENERGETICS

This Ph.D. program covers all aspects of Health and Exercise Science. While it primarily prepares students for academic and research careers, it is also a pathway to careers outside academia (e.g. public health, research foundations, footwear/equipment, pharmaceutical, or nutrition industries) that require advanced training in research. The program trains professionals in basic and applied research centered around preventing age-related decline in human health and function, understanding the pathophysiology of disease and disability, as well as designing and testing novel countermeasures and maximizing functional performance in first responders, soldiers, and athletes.

## Learning Objectives

1. Demonstrate knowledge and critical thinking skills within the research laboratory and the classroom (leadership, administrative, teaching/communication, and professional attitude) through laboratory and teaching experiences.
2. Design, implement, execute, and complete novel scientific experiments, reflecting the proper conduct of scientific inquiry.
3. Appraise and apply understanding of ethical issues related to conducting research, best scientific practices and standards for rigor and reproducibility, and apply these in their dissertation.
4. Conduct advanced data analysis in quantitative and/or qualitative processes.
5. Disseminate knowledge effectively through written and verbal communication with expectations that doctoral students submit at least one grant application and publish a minimum of one, first-author manuscript in a peer-reviewed scientific journal.

Learn more about the Ph.D. in Human Bioenergetics on the Department of Health and Exercise Science website.

Students interested in graduate work should refer to the Graduate and Professional Bulletin (https://catalog.colostate.edu/general-catalog/graduate-bulletin/).