

Laboratories

The Department of Nutritional Sciences is housed within the College of Human Environmental Sciences at Oklahoma State University. Our department, based in 301 HES, deals with all aspects of nutrition from research to public education and awareness. Our laboratories accommodate a variety of experimental techniques to study molecular and physiological effects of nutritional variables in animal and human models. In addition, the Department of Nutritional Sciences is home to the Metabolic and Nutrition Phenotyping Core Facility.

Laboratory space is laid out to coordinate similar techniques into one area. Our general laboratory provides personal space to each researcher for storage and preparatory work. Specialized techniques are generally carried out in one of the other labs that are equipped for such purposes. We have areas designated for molecular work, tissue culture, trace element analysis, short term (overnight) animal husbandry, necropsy, blood analysis, bone analysis, anthropometric assessment, stress testing and resting metabolic rates.

The Department of Nutritional Sciences has 5280 square feet of main research laboratories. Each faculty member has an individual unit as well as access to common laboratory space. In addition, there is a separate laboratory with air flow controls for trace mineral analyses and tissue/cell culture. Clean air benches, a biological safety cabinet and incubators are included in this laboratory. Another laboratory is dedicated to animal handling and is equipped for overnight housing and surgery units. A diet formulation room is located adjacent to the animal room. The laboratory is equipped with modern recently-acquired equipment. Each researcher also has his/her own small equipment. Reverse osmosis water is supplied to each laboratory bench. Further purification by distillation and ion exchange using a Millipore system is also available.

Clinical:

An additional laboratory is devoted to clinical trials with human subjects. This laboratory is approximately 950 square feet. Space is dedicated for assuring privacy for subjects and accurate collection of data. Equipment is available for body composition and bone density, anthropometrics assessment, diet analysis, and subject interviewing.

Animals:

Oklahoma State University has a central Laboratory Animal Research Unit. All laboratory animals involved in research are housed and fed in these light, temperature and humidity controlled facilities. There is a veterinarian on site responsible for this facility. Animals may be housed in the Departmental Research Facilities for 24 hours for surgery or for metabolic collections; these departmental facilities have been inspected and approved for animal housing. Necropsy is conducted in the departmental animal laboratory.

Computer:

Each researcher has his/her own computer with appropriate software. All computers are also networked with access to appropriate statistical packages (SAS and SPSS) and libraries. Computers are also located at workstations in the laboratory for data entry and analysis. These are available to students assigned to the project. The University also has easily accessible computer laboratories available to all students and faculty.

Office:

Each researcher has his/her own private office. These offices are located adjacent to the research laboratories.

Other:

The University has central purchasing and grants and contracts management offices. The College also has a financial office dedicated to research support. The Department has secretarial and accounting support available as needed for this project. In addition, the University has a central chemistry storeroom, an electronics shop, and other equipment support facilities.

- Major Equipment List
- NSCI Equipment Fees