

**Department of Animal Sciences, The Ohio State University
Undergraduate Internship Position Description**

POSITION TITLE & LOCATION: Animal Research Experience - Poultry Vaccine Research - Columbus, OH

POSITION AVAILABLE:

Dates: June 2008 – September 2008

Hours: 8am until 5pm; some flexibility required

WAGES/SALARY:

Wages: \$8.00 per hour for maximum 400 hours

SUPERVISOR INFORMATION:

Dr. Kimberly Cole
Department of Animal Sciences
222D Animal Science Building
2029 Fyffe Court
Columbus, OH 43210-1095

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES:

- Assist with the collection of data during poultry research trials in the area of immunology and microbiology.
- Assist with data analysis (i.e. assays, data entry, interpretation of results).
- Prepare a poster or oral presentation at the end of the internship.

KNOWLEDGE & EXPERIENCE INTERN SHOULD GAIN:

- An understanding of basic laboratory techniques.
- An understanding of the research process.
- A basic understanding of microbiology and immunology with regard to the development of bacterial-vectored vaccines.

**Department of Animal Sciences, The Ohio State University
Undergraduate Internship Position Description**

POSITION TITLE & LOCATION: Animal Sciences Research Experience – Equine -
Columbus, OH

POSITION AVAILABLE:

Dates: June 2008 – September 2008

Hours: 8am until 5pm; some flexibility required

WAGES/SALARY:

Wages: \$8.00 per hour for maximum 400 hours

SUPERVISOR INFORMATION:

Dr. Kimberly Cole
Department of Animal Sciences
222D Animal Science Building
2029 Fyffe Court
Columbus, OH 43210-1095

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES:

- Assist with the collection of data during research trials in the area of equine immunology and/or reproduction.
- Assist with data analysis (i.e. assays, data entry, interpretation of results).
- The student must have their own transportation for travel to OSU Equine Facility and local horse farms.
- Prepare a poster or oral presentation at the end of the internship.

KNOWLEDGE & EXPERIENCE INTERN SHOULD GAIN:

- An understanding of basic laboratory techniques.
- An appreciation of the research process.
- Communication skills.

**Department of Animal Sciences, The Ohio State University
Undergraduate Internship Position Description**

POSITION TITLE & LOCATION: _Animal Sciences Research Experience_ - Ruminant Nutrition – Columbus, Ohio

POSITION AVAILABLE:

Dates: From _June 9, 2008_____ to ___August 22, 2008_____

Hours: From ___8:00 am_ to ___5:00 pm_____

WAGES/SALARY:

Salary \$ _____ Wages \$ 8/hour for 400 hours maximum _____

SUPERVISOR INFORMATION:

Name, Title, Company Name: Dr. Maurice L. Eastridge, Professor _____

Address: Department of Animal Sciences, The Ohio State University, 2029 Fyffe Court, 221B Animal Science Building, Columbus, OH 43210-1095

Phone_(614) 688-3059__Fax__(614) 292-1515 _____

[Email_eastridge.1@osu.edu](mailto:eastridge.1@osu.edu) Website Address: <http://ansci.osu.edu/eastridge>

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES:

- Conduct chemical analyses in the ruminant nutrition laboratory
- Assist in collection of data during research trials
- Assist with feeding animals on research trials
- Input and organize research data in a spreadsheet
- Depending on the student's interests and experience, they may engage in a research project of their own
- Assist with the education of youth about feeding dairy cattle
- Prepare a poster for the CFAES Undergraduate Research Forum and Denman Undergraduate Research Forum that are held during Spring Quarter

KNOWLEDGE & EXPERIENCE INTERN SHOULD GAIN:

- An understanding of the importance of the accuracy of laboratory analyses
- An understanding of some of the major areas of research in ruminant nutrition
- An understanding of the research process, from a hypothesis to conducting a research trial to data interpretation
- An understanding of some of the research methods in ruminant nutrition
- An appreciation for the use of computers in data storage and analysis

**Department of Animal Sciences, The Ohio State University
Undergraduate Internship Position Description**

POSITION TITLE & LOCATION: _____Animal Sciences Research Experience, Columbus, Ohio – Dairy Nutrition_

POSITION AVAILABLE:

Dates: From _____As applicable _____to

Hours: From _____As Applicable _____to

WAGES/SALARY:

Salary \$ _____Wages \$ 8/hour for 400 hours maximum _____

SUPERVISOR INFORMATION:

Name, Title, Company Name _____Dr. Jeff Firkins_

Address 14 Animal Science Building, 2029 Fyffe Road

Phone _____292-7147 _____

Email firkins.1@osu.edu__Company Website Address:

<http://ansci.osu.edu/showdetails.php?FID=20>

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES:

The student is primarily expected to assist other graduate students in conducting research experiments in the field of animal nutrition. Additional job responsibilities may include the planning and conducting of assigned experiments, data entry into spreadsheets, and statistical analyses of experimental data. The student may also be required to help in the housekeeping tasks in the lab.

KNOWLEDGE & EXPERIENCE INTERN SHOULD GAIN:

The internship will provide an opportunity for the student to gain valuable laboratory experience and understand the basics of research in animal nutrition. The practical knowledge gained in the lab will augment the theoretical information the student would obtain in classes and this will help them to understand the scientific process better. Interaction with the faculty, research staff, graduate and undergraduate students will provide an opportunity to improve communication skills and learn how to work as part of a research group. Laboratory techniques and skills acquired during the internship will be helpful in future endeavors in academia or industry.

**Department of Animal Sciences, The Ohio State University
Undergraduate Internship Position Description**

POSITION TITLE & LOCATION: Summer Intern – OARDC Mastitis Lab, Wooster, Ohio

POSITION AVAILABLE:

Dates: From June 16 to August 22, 2008

Hours: From 7:30 to 4:30

WAGES/SALARY:

Wages \$ 8 per hour for 400 hours maximum

SUPERVISOR INFORMATION:

Name, Title, Company Name: Joe Hogan, OARDC Mastitis Lab

Address; Pounden Hall, OARDC, Wooster, OH 44691

Phone 330.263.3801 Fax 330.263.3603

Email hogan.4@osu.edu

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES:

Assist in mastitis laboratory and field work. Collect samples and perform routine diagnostic tests for bacteriological and cytological examination of milk. Complete a mastitis trial in the areas of diagnostics, environmental exposure, host defense or animal welfare. Assist in accepting and processing samples submitted to lab by veterinarians and producers.

KNOWLEDGE & EXPERIENCE INTERN SHOULD GAIN:

Student will gain an understanding of etiology of mastitis and means to diagnose and control the disease. Student will be expected to participate in activities allowing for hands on experience in laboratory and with collecting milk and blood samples from dairy cows.

**Department of Animal Sciences, The Ohio State University
Undergraduate Internship Position Description**

POSITION TITLE & LOCATION: _____ Meat Science Research Intern – Columbus, Ohio

POSITION AVAILABLE:

Dates: From__ June 26, 2008 __to __August 21, 2008__

Hours: From_____7:30_____to _____4:30 (most of the time) _____

WAGES/SALARY:

Wages \$ 8/hour for 400 hours maximum_____

SUPERVISOR INFORMATION:

Name, Title, Company Name: Paul S. Kuber Assistant Professor The Ohio State University

Address: 2029 Fyffe Court Department of Animal Sciences Rm 122D Columbus, Ohio 43210

Phone 614-247-8305

Fax 614-292-3513

[Email_kuber.2@osu.edu](mailto:kuber.2@osu.edu) Company Website Address

<http://ansci.osu.edu/showdetails.php?FID=165>

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES: Responsibilities and duties include, but are not limited too, working on meats related projects in palatability and product development. Helping to complete basic biochemistry and applied research techniques used in determining meat quality. Further, this intern will be expected to collect review and critique current pertinent information regarding the specific research project they will be working on. The intern will be encouraged to offer suggestions and comments on the project and will be included as an author on any publishable data that is produced with their influence. Further, the intern will be responsible for the organization, documentation and reporting of data. Computer skills in Word and Excel are required and a willingness to learn other computer programs used in science and data analysis is desired.

KNOWLEDGE & EXPERIENCE INTERN SHOULD GAIN: Much of the research will be geared toward increasing consumer satisfaction through improvements in flavor, juiciness and tenderness. This will be a comprehensive internship that will allow the student to be a part of preliminary data collection, scientific grant and paper writing, as well basic and advanced research techniques. Further, data analysis and understanding collection, documentation and reporting of data will also be included in this summer internship. Opportunities for hands on work in the meat lab as well as laboratory time in the meat chemistry lab, will be emphasized. An understanding of the instrumentation that is used in determining tenderness and how it relates to sensory panels and consumer acceptance will be gained. The intern will gain many useful skills that can be used in the Meats industry and/or Graduate education.

**DEPARTMENT OF ANIMAL SCIENCES, THE OHIO STATE UNIVERSITY
UNDERGRADUATE INTERNSHIP POSITION DESCRIPTION**

POSITION TITLE & LOCATION: Research Intern, OSU Poultry Barn and Nutrition Laboratory - Columbus, Ohio

POSITION AVAILABLE:

Dates: From 6/15/08 to 8/30/08

Hours: From 8 to 5

WAGES/SALARY:

Salary \$ _____ **Wages** \$ 8/hour for 400 hours maximum _____

SUPERVISOR INFORMATION:

Name, Title, Company Name David Latshaw, Professor, OSU, Dept of Animal Sciences

Address 2027 Coffey Road, Plumb Hall, Columbus, OH 43210

Phone 688-3238 **Fax** 292-7116

Email latshaw.1@osu.edu **Company Website**
<http://ansci.osu.edu/showdetails.php?FID=29>

DETAILED SUMMARY OF DUTIES AND RESPONSIBILITIES

Approximately 25% of the time will be spent doing farm chores: Feeding, collecting eggs, packing eggs for pickup and shipment, and cleaning. The remaining time will be spent on research. An experiment to compare short assay periods for determining metabolizable energy is planned. This involves training roosters to eat a day's feed in a relatively short time, feeding, collecting samples, determining energy content of samples, and entering data into spreadsheets.

KNOWLEDGE AND EXPERIENCE INTERN SHOULD GAIN:

An intern will learn and do all jobs that are needed to run the OSU Poultry Farm. After learning how to do the jobs, the student should assume most of the responsibility for managing time. From the experiment, the student will learn the basics about designing an experiment. Some library research will be needed. The experiment requires measuring feed eaten, collecting samples, and measuring energy content with bomb calorimetry. Results will be entered in a spreadsheet in preparation for statistical analysis.

**Department of Animal Sciences, The Ohio State University
Undergraduate Internship Position Description**

POSITION TITLE & LOCATION: Internship student at 138 Animal Science Bldg – Columbus, Ohio

POSITION AVAILABLE:

Dates: From June 9 to September 8

Hours: Variable

WAGES/SALARY:

Salary \$ _____ Wages \$ 8/hour for 400 hours maximum _____

SUPERVISOR INFORMATION:

Name, Title, Company Name Kichoon Lee, Assistant Professor, Dept. of Animal Sciences

Address 222F Animal Science Building, 2029 Fyffe road, Columbus, OH 43210

Phone 614-688-7963 Fax 614-292-2929

Email lee.2626@osu.edu Company Website Address:
<http://ansci.osu.edu/showdetails.php?FID=162>

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES:

Assists postdoctoral researcher and conducts molecular biology research on the effect of target genes on fat and muscle development, and food intake regulation. Lab. duties include purification of nucleic acids and proteins, PCR, quantitative real-time PCR, electrophoresis of protein or DNA/RNA samples, and standard gene cloning procedures.

KNOWLEDGE & EXPERIENCE INTERN SHOULD GAIN:

Our research interests are to identify and define genetic and metabolic networks that promote the efficiency of livestock production. 1) Discovery of genes or proteins using microarray and proteomics technology, 2) Functional genomics approaches to study the functions and roles of genes using in vitro and in vivo systems, including cell cultures and transgenic or knockout mouse models, 3) Extended research of the genes to evaluate target genes for pharmaceutical application for treatment of human metabolic diseases and for improvement of animal production, 4) Identification of molecular mechanisms of food intake regulation in the brain. Students will learn various new technologies, concepts and their application to improve animal production.

**Department of Animal Sciences, The Ohio State University
Undergraduate Internship Position Description**

POSITION TITLE & LOCATION: _ Animal Sciences Research Experience in Wooster, Ohio
– Poultry Nutrition_____

POSITION AVAILABLE:

Dates: From _____ Summer Quarter _____ to _____

Hours: From _____ 8_ am _____ to _____ 5
pm _____

WAGES/SALARY:

Salary \$ _____ Wages \$ 8/hour for 400 hours maximum _____

SUPERVISOR INFORMATION:

Name, Title, Company Name _Michael S. Lilburn

Address __ Gerlaugh_Hall _____

Phone __ 330-263-3992 _____ Fax __ 330-263-3949

Email Lilburn.1@osu.edu _____ Company Website Address
<http://ansci.osu.edu/showdetails.php?FID=31>

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES:

This position would involve direct involvement in experiments with poultry. Depending upon the interests of the student, it might involve practical type nutrition experiments working at the poultry research farm combined with data analysis in the lab or an in lab experience using histological techniques to study intestinal development. The on farm experiments would most likely include some aspect of environmental nutrition (nutrition experiments with nutrient reduction as the focal point).

**Department of Animal Sciences, The Ohio State University
Undergraduate Internship Position Description**

POSITION TITLE & LOCATION: Animal Sciences Research Experiences Internship - Beef and Sheep Nutrition Lab – Wooster, Ohio

POSITION AVAILABLE:

Dates: June, 2008 to September, 2008

Hours: 8:00 to 5:00

WAGES:

\$8.00/Hour for max 400 hours.

SUPERVISOR INFORMATION:

Name, Title, Company : Steven C. Loerch , Professor, The Ohio State University, OARDC

Address: Dept. of Animal Sciences, 1680 Madison Ave, Wooster Ohio 44691

Phone: 330-263- 3900

Fax: 330-263-3949

Email: Loerch.1@osu.edu

Company Website Address: [http//ansci.osu.edu](http://ansci.osu.edu)

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES:

1. Conduct guided laboratory analysis of various biological samples and record results.
2. Assist in collection of animal data in confined and open grazing environments. (Includes working with large animals in feedlot areas.)
3. Assist in collection of field samples for animal studies.
4. Aid in summarization of data for reports.

KNOWLEDGE & EXPERIENCE INTERN SHOULD GAIN:

1. An understanding of the scientific method .
2. An understanding of safe and proper laboratory procedure.
3. Familiarity with planning and conducting sample collection for large animal nutrition experiments.
4. An insight of how laboratory methods are developed.

**Department of Animal Sciences, The Ohio State University
Undergraduate Internship Position Description**

POSITION TITLE & LOCATION: Animal Science Research Internship, Columbus

POSITION AVAILABLE:

Dates: From April 1, 2008 **to** September 15, 2008

Hours: From Flexible **to** Variable but preference is for 4-5 hour blocks of time

Seeking an applicant that can work on internship 20 hours per week for 20 weeks beginning spring quarter and through the summer of 2008

Application

Deadline _____

WAGES/SALARY:

Salary \$3200 total **Wages \$** \$8.00 **per hour**

SUPERVISOR INFORMATION:

Name, Title, Company Name Donald C. Mahan, Professor Animal Nutrition

Address Room 205 Plumb Hall, 2027 Coffey Road, Animal Sciences Department

Phone 614.292.6987 **Fax** _____

Email mahan.3@osu.edu **Company Website**

Address _____

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES:

- Conduct chemical analyses in the swine nutrition laboratory. Training provided
- Assist in collection of data during research trials. Training provided
- Input and organize research data in a spreadsheet
- The student will conduct an experiment during the course of their internship.
- Prepare a poster for the CFAES Undergraduate Research Forum and Denman Undergraduate Research Forum held during Spring Quarter

KNOWLEDGE & EXPERIENCE INTERN SHOULD GAIN:

- An understanding of the importance of the accuracy of laboratory analyses
- An understanding of the research process, from a hypothesis to conducting a research trial to data interpretation
- An understanding of research methods in swine and poultry nutrition
- An appreciation for the use of computers in data storage and analysis
- Prepares student for postgraduate work or for entrance into veterinary school

Undergraduate Internship Position Description

POSITION TITLE & LOCATION:__126 Vivian Hall – Columbus, Ohio

POSITION AVAILABLE:

Dates: From___Summer Quarter_____

WAGES/SALARY:

Salary \$_____ **Wages \$ 8/hour for 400 hours maximum**_____

SUPERVISOR INFORMATION:

Name, Title, Company Name___Macdonald Wick

Address___125 Vivian Hall_

Phone___614-292-7516_____

Email___wick.13@osu.edu_ Company Website Address

<http://ansci.osu.edu/showdetails.php?FID=53>

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES:

Students will work as a member of a team composed of graduate students in performing functional genomics on skeletal muscle from cattle, sheep, poultry and fish. The student will gain experience in the use of standard analytical biochemical techniques including

1. Buffer preparation, polyacrylamide gel preparation.
2. Proteomic analysis through the use of image analysis software to compare differential protein expression patterns in the muscles from different animals

KNOWLEDGE & EXPERIENCE INTERN SHOULD GAIN:

1. Students will come away with an understanding of experimental design based on the formation of testable hypothesis.
2. The student will gain an appreciation of the use and value of team work in exploring questions of biological interest.
3. The student will gain experience with biochemical tools and techniques.
4. Students will gain experience in recording and analyzing data.

**Department of Animal Sciences, The Ohio State University
Undergraduate Internship Position Description**

POSITION TITLE & LOCATION: Summer Internship with the MAPLE Research Initiative
– Columbus, Ohio

POSITION AVAILABLE:

Dates: From mid-June, 2007 through August, 2007

Hours: Flexible, although ~40 hours per week required

WAGES/SALARY:

Salary \$ _____ Wages \$ 8/hour for 400 hours maximum _____

SUPERVISOR INFORMATION:

Name, Title, Company Name: Mark Morrison and Zhongtang Yu, Animal Sciences
Dept.

Address: 110E ASL, 2029 Fyffe Court

Phone: 292-30570 **Fax:** 292-2929

Email: Morrison.234@osu.edu or yu.226@ous.edu

Company Website Address: <http://ansci.osu.edu/maple>

DETAILED SUMMARY OF DUTIES & RESPONSIBILITIES:

If you are interested in learning more about the microbiology of the animal digestive tract, and the impacts it has on either animal nutrition, the environment or food safety, then consider doing an internship with the MAPLE research initiative in the Department of Animal Sciences. Please visit www.ansci.osu.edu/maple for more details. You will be given an opportunity to learn molecular-based methods used to characterize and enumerate specific bacterial groups and (or) specific genes such as those encoding antibiotic resistance and feed digestion, as part of larger trials with both animals and human subjects.

KNOWLEDGE & EXPERIENCE INTERN SHOULD GAIN:

- An understanding of the practice and recording of quality scientific research
- An understanding of some of the major areas of research in gut microbiology
- Competency in elementary recombinant DNA or other DNA-based methods