

# ANIMAL AND AVIAN SCIENCES

## College of Agriculture and Natural Resources

1415 Animal Sciences Center

Phone: 301-405-1373

[ansc-chair@umd.edu](mailto:ansc-chair@umd.edu)

<http://ansc.umd.edu>

The Department of Animal and Avian Sciences was formed in 1997 through the merger of the Animal Science, Dairy Science and Poultry Science Departments. Animal science is the study of domesticated animals used for food, biomedical research and leisure. Our department fulfills a tripartite mission of research, teaching and extension. Departmental research programs are focused in four areas:

1. Animal Genetics and Cell Biology
2. Nutrient Utilization and Management
3. Animal Reproduction and Development
4. Pathobiology & Infectious Diseases
5. Animal Behavior & Well-Being

The Animal Science graduate program offers advanced training in each of these research focus areas. Our undergraduate program offers three options to prepare students for their chosen career. Graduates of our program go on to graduate or professional schools, or go directly to work in the fields of animal biotechnology or animal management in the equine, laboratory animal, livestock or poultry industries. Opportunities are available, both on-campus and off-campus, for hands-on experience with small and large animals.

Our location in the Washington DC metropolitan area offers a wealth of other opportunities for internships and collaborations for undergraduate and graduate students with government agencies such as the USDA, EPA, FDA, and National Zoo. Our University of Maryland Extension efforts provide educational materials and non-degree training for the families and companies working in animal agriculture throughout the State of Maryland. Additional information on all of our efforts and programs can be found through the links on the ANSC website (<http://ansc.umd.edu/>).

## PROGRAMS

### Major

- Animal Sciences Major (<https://academiccatalog.umd.edu/undergraduate/colleges-schools/agriculture-natural-resources/animal-sciences/animal-sciences-major/>)

## ADVISING

The Animal Science Department has mandatory advising, which means that a student must fulfill their advising requirement every semester prior to being allowed to register. Students in ANSC currently progress through advising in a system determined to help them explore their goals and get the most accurate information possible in their early advising. We want to help students transition from a typical high school model of advising being about school counselors helping them choose courses to students learning to make their own independent choices regarding education, career, and life, under the mentorship of faculty. Please visit our ANSC website (<http://ansc.umd.edu/undergraduate/>) for more information on Advising in ANSC (<https://ansc.umd.edu/undergraduate/current-students/academics-advising/#advising>), including a detailed Advising Guide FAQ (<https://ansc.umd.edu/undergraduate/faqs/>).

## OPPORTUNITIES

### Academic Programs and Departmental Facilities

Our facilities in the Animal Sciences Center include classrooms, an inviting lecture hall, and a large social area for students. The entire building is Wi-Fi accessible, and numerous charging outlets are available for student use. Our teaching facilities also include two fully-equipped teaching labs and an aquaculture lab, while our animal wing contains animal rooms and a surgery suite.

The Campus Farm (<http://ansc.umd.edu/undergraduate/campus-farm/>) has been described as a “jewel” to the ANSC undergraduate program activities. It is used extensively in teaching laboratories in undergraduate courses, and includes three barns separately used for horses, sheep, and dairy cows, with temporary occupancy for pigs and beef heifers during short parts of the year. We are one of the few animal science departments with the presence of animals directly on campus. Three student organizations, the Institute for Applied Agriculture, and many “Ag Day” visitors use the farm as well, making it a focal point of our teaching facilities.

### Undergraduate Research Experiences

Because it is part of a land grant university, the Department of Animal and Avian Sciences also has responsibility for research and technology transfer to the animal industry throughout Maryland. During undergraduate study, students are encouraged to conduct independent research in faculty laboratories on campus or at the nearby U.S. Department of Agriculture Beltsville Agricultural Research Center. Students interested in a faculty member’s research should directly contact that faculty member. Research jobs and opportunities are also frequently posted on the ANSC Undergraduate listserv, to which all ANSC students are subscribed. More information on how to find research opportunities is available on our Current Students (<https://ansc.umd.edu/undergraduate/current-students/>) webpage.

### Internships

Students are encouraged to gain practical hands-on and career experience by pursuing internships. Students have completed internships in locations ranging from the area around the university, to cattle farms in the Midwest, agribusiness firms in California, and places like the National Zoo in DC and the National Aquarium in Baltimore. Many animal sciences students use the summer to gain additional applied experience in animal sciences, veterinary medicine or agribusiness. Students can find information about internships, including the process for gaining academic credit for an internship, on the ANSC website’s Internship section (<http://ansc.umd.edu/undergraduate/internships/>). Internship opportunities are also frequently posted on the ANSC Undergraduate listserv, to which all ANSC students are subscribed.

### Honors Program

Students admitted to the AGNR Honors Program (<https://agnr.umd.edu/academics/undergraduate-honors/>) are eligible to take 3 - 6 credits of ANSC399 (<https://ansc.umd.edu/undergraduate/current-students/academics-advising/internships/academic-credit-internships/>) within the ANSC Department. Undergraduate honors thesis research is conducted under the direction of an AGNR faculty member in partial fulfillment of the

requirements of the College of AGNR Honors Program. The thesis will be defended before a faculty committee.

## Student Societies and Professional Organizations

The clubs and organizations affiliated with the Animal Science department allow ample opportunities for leadership, development, hands-on animal experience, and fun!

### Alpha Gamma Rho

<http://agnr.umd.edu/student-opportunities/clubs-and-organizations/alpha-gamma-rho-fraternity/>

Alpha Gamma Rho is a social/professional fraternity that has been a training ground for leaders in the agriculture and life sciences community since it was established at College Park in 1928. AGR has a rich tradition of alumni contacts with over 50,000 brothers nationwide, including over 700 brothers in the Washington area alone. AGR men are leaders in various clubs within the college and the fraternity is an active member of both the Inter-fraternity Council (IFC) and the Ag Student Council. Alpha Gamma Rho stresses scholarship, leadership and fellowship, and it is well respected among Greek organizations because of their no pledging, substance free, scholars environment. In addition, the chapter house on Princeton Avenue offers the opportunity to live with brothers who are taking the same classes and share many of the same interests which makes it much easier to find a niche on such a large campus.

### Block and Bridle Club

<https://umdblockandbridle.wixsite.com/blockandbridle> (<https://umdblockandbridle.wixsite.com/blockandbridle/>)

The Animal Husbandry Club at the University of Maryland, provides opportunities for students to gain animal handling experience, build interpersonal relationship skills, and students are given the encouragement to excel! Activities and experiences specifically designed for students of diversified interests in animal agriculture are provided, including experiences with many different domestic species. Membership is open to all undergraduate students interested in getting hands-on experience working with dairy, beef, sheep or swine, and learning more about general animal sciences. Activities include the Ag Day Dairy and Livestock Shows, Harvest Stomp/Fall Festival, fitting of animals for the annual Wye Angus Sale, and other activities working with dairy animals. One can gain further leadership skills by holding an office. Each Spring, elections are held for President, Vice-President, Secretary, Treasurer, and Historian.

## MANRRS (Minorities in Agriculture, Natural Resources and Related Sciences)

<http://www.manrrs.org>

### MANRRS Missions

This club was reinstated on University of Maryland's campus to provide academic and professional advancement by empowering minorities in agriculture, natural resources and related sciences.

### MANRRS Activities

MANRRS' purpose is to promote exposure to agricultural related professions including veterinarians, lab animal techs, and jobs in the USDA, along with others to minorities. It lists internship opportunities, and holds annual conferences for its members from all chapters. It also

serves as a networking tool for students interested in agriculture and related science professions.

Activities include: Club Meetings once a month; Fundraisers to provide funding for field trips to meetings at possibly University of Maryland at Eastern Shore; annual MANRRS conferences and job fairs; Volunteer Opportunities at SPCA; Guest Speakers in the veterinary medicine, agriculture, and lab animal medicine field.

### Maryland Equestrian Club

[president.mec@gmail.com](mailto:president.mec@gmail.com)

<http://sites.google.com/site/marylandequestrianclub/>

The Maryland Equestrian Club provides on-campus horseback riding lessons and equine learning opportunities for campus students and faculty at beginner through advanced levels. The ANSC department provides the barn, equipment, riding arenas and horses while the students provide care for the horses. There is a riding fee of \$200 per semester for 1 riding lesson a week for the entire semester. Large deductions are easily earned for help with feeding, cleaning stalls or teaching. Club members not riding are strongly encouraged to participate in other club activities, such as educational and fun seminars, field trips and monthly meetings. In the past, MEC members have attended the Columbia Grand Prix and the Washington International Horse Show and taken field trips to the DuPont Veterinary Medical Center in Leesburg, VA. and Days End Horse Rescue Farm in Maryland. Members have also participated in clinics on tack fitting and identifying lameness in horses. Club members, under the leadership of the Executive Board and Directors, make most MEC club decisions. We offer a great opportunity to all students and we're always open to suggestions. We also try to have something for everyone including basic English equitation, Western equitation, dressage, bareback and trail riding, horse and farm management, veterinary care, teaching skills and much more. The MEC is located at the campus horse barn, and our office is in the Shack, right next to the paddocks. There is very limited space in the riding lessons, so e-mail us right away to reserve yourself a spot in the most educational equine club provided by the University of Maryland.

### The Pre-Veterinary Society

<http://agnr.umd.edu/student-opportunities/clubs-and-organizations/pre-vet-society/>

The primary objectives of the The Pre-Veterinary Society are to: promote a deeper understanding of the numerous opportunities in veterinary medicine; exchange information on veterinary and animal experiences; and keep students updated on the latest veterinary school information.

What does the The Pre-Veterinary Society do?

- A variety of guest speakers are invited to club meetings to talk about their specialties or field of interest. A sample of topic include wildlife rehabilitation, laboratory animal medicine, exotic pet care and veterinary ethics.
- Each year, faculty from the Virginia-Maryland Regional College of Veterinary Medicine speak to club members about veterinary medical school. Mock interviews are held in January to prepare our club members for the admissions process.
- Club sponsored trips offer our members the ability to tour various veterinary medical facilities and talk to veterinary students and faculty and to visit local zoos and animal care facilities.
- Each year we participate in the APVMA National Symposium which is held at different veterinary schools annually. This is an excellent

opportunity to visit a vet school, plus hear over 30 speakers on numerous topics and participate in a variety of wet and dry lab.

- Volunteer with the Prince George's County Animal Shelter in partnership with PetSmart to help find homes for abandoned animals

## Sigma Alpha

<http://agnr.umd.edu/student-opportunities/clubs-and-organizations/sigma-alpha-sorority/>

Sigma Alpha is a national professional agricultural sorority. The objective of the sorority is to promote its members in all facets of agriculture and to strengthen the friendships among them. Members strive for achievement in scholarship, leadership, service, and to further the development of women pursuing careers in agriculture. Sigma Alpha works to promote agriculture, and women's role, on our campus, in our community and throughout the state. Activities include: attending regional and national conferences/conventions; participating in college events (Fall Bash, ANSC orientation, Cook-Offs); service activities - including teaching agriculture to local elementary students and judging contests for the Maryland FFA; professional Guest speakers, and participating in MD day/Ag day Membership rush is held on a semester basis. To be eligible, potential members must have: 2.25 cumulative GPA, Agriculture major or sincere interest in agriculture, be a member of 1 other group or Enrolled in 18 credits or working 10 hours a week.

## University of Maryland Equestrian Team

[Equiterps@gmail.com](mailto:Equiterps@gmail.com)

The University of Maryland Equestrian Team is a sports club that competes in intercollegiate competition through the Intercollegiate Horse Show Association (<http://ihsainc.com>). Throughout the year we compete against area schools such as Goucher, UMW, American, and many others. Though showing is available to all team members, it is not required. Our team rides once a week at Oatland Stables in Gaithersburg, MD. Additionally, our members have the opportunity to participate in clinics and other horse-related events. Riders ranging from the levels of walk/trot to open jumping (3' courses) are welcome to join our team. Please feel free to send any questions to [Equiterps@gmail.com](mailto:Equiterps@gmail.com). Also, like our page "Terps Equestrian Team" on Facebook (<https://www.facebook.com/pages/Terps-Equestrian-Team/112106182178428/>)!

## Scholarships and Financial Assistance

The ANSC program administers several scholarships, including:

American Registry of Professional Animal Scientists (ARPAS) Washington, DC Area Chapter Scholarship, Judith E. Brocksmith Pre-Veterinary Scholarship, C.W. England, Tom Hartsock Animal Management Scholarship, the Kinghorne Fund Fellowship, and the Lillian Hildebrandt Rummel Scholarship. For eligibility criteria, visit the ANSC Scholarship page. (<https://ansc.umd.edu/undergraduate/current-students/academics-advising/#scholarships>)

The Office of Student Financial Aid (OSFA) administers all types of federal, state and institutional financial assistance programs and, in cooperation with other university offices, participates in the awarding of scholarships to deserving students. For information, visit: <http://financialaid.umd.edu>.

## Awards and Recognition

ANSC Faculty and students have been the recipients of numerous prestigious awards and honors. To read more about our exceptional community, visit our News (<https://ansc.umd.edu/news/>) page.