

Physical Resources

Land and Facilities	Description
Virginia Tech owned farm	420 acres; multiple horse and livestock barns, houses for employees and students, pastureland, forestland, grassland, riparian area, nature trail and conservation area
Lab/office complex	9,708 sq. ft. of total building space; conference room (33 person capacity), main office, laboratories, equine clinic, annex building housing facility and student offices, machine shop and equipment storage buildings
Other structures	High speed equine treadmill, 6 horse exerciser, equine handling areas with scales and stocks

Director – David Gerrard, dgerrard@vt.edu

Resident Faculty

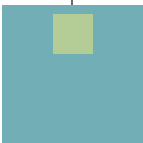
Faculty	Research and Extension Focus Areas
Bridgett J. McIntosh Equine Extension Specialist, Animal and Poultry Sciences (APSC) 540-687-3521 (ext. 22) bmcintosh@vt.edu	Equine nutrition, forages, conservation practices, and Extension education

Non-resident Faculty Conducting Research and Collaborative Work

Faculty	Research Involvement at Reynolds
Sally Johnson Paul Mellon Distinguished Professor of Agriculture, Animal and Poultry Sciences, Virginia Tech	Equine tendon repair and regenerative medicine
Harold C. McKenzie, III Associate Professor, Large Animal Clinical Sciences, Virginia Maryland College of Veterinary Medicine	Aerosol therapy, respiratory disease, critical care, endocrinology
Amy O. Burk Associate Professor, University of Maryland, Animal and Avian Sciences	Equine nutrition, forages, conservation practices, and Extension education
Amy S. Biddle Animal and Food Sciences, University of Delaware	The equine microbiome in health and disease
Biswarup Mukhopadhyay Associate Professor, Biochemistry, Virginia Tech	Methanogenic archaea, hydrothermal vent, early earth, evolution of redox metabolism, bioenergy production, redox metabolism of mycobacteria
Jessica Suagee Bedore Assistant Professor, The Ohio State University	Equine nutrition and inflammation
Tom Akre Director of Virginia Working Landscapes, Front Royal, VA	

Postdoctoral Scientists, Graduate Students, and Student Interns

Individual	Advisor	Program and Focus Area
Katelyn Kaufman	McIntosh	Ph.D. Candidate, APSC
Katlyn Delano	McIntosh	M.S.Candidate, APSC
6-8 interns	McIntosh, Arnold, Ghajar	Various undergraduate research projects and experiential education program in equine science and land stewardship



Farm Management, Technical, and Office Staff

Funding Category	Employees	Comment
State Funded, full-time	2	1 farm manager, 1 office staff
Department Funded, full-time	1	1 technician

Virginia Cooperative Extension Program Associates

Associates	Region Served	Extension Program Focus
Shayan Ghajar	State	Program Coordinator, equine and land management
Sandy Arnold	State	Youth Equine Extension Associate

Research and Extension Programs

The Middleburg Agricultural Research and Extension (MARE) Center creates, integrates and shares knowledge to improve the health and well-being of the horse, the environment and the community. Through interdisciplinary, collaborative efforts, the MARE Center addresses current and emerging issues in equine forage-based management systems while developing tomorrow's leaders in an international model of experiential learning. Situated in the heart of Virginia's horse country, the Middleburg Agricultural Research and Extension (MARE) Center is one of Virginia Tech's 11 agricultural research and extension centers. Philanthropist Paul Mellon donated the 420-acre farm to Virginia Tech in 1949 to foster research that improved pasture and animal health while enhancing the land. Today, the MARE Center continues to play a critical role in the discovery, outreach, and education missions of Virginia Tech's College of Agriculture and Life Sciences.

Research:

Through collaboration with academic and industry partners around the world, the Center advances the health and wellbeing of the horse through its innovative multidisciplinary research efforts. Our areas of research include:

- Equine Nutrition and Health
- Grazing Systems and Pasture Management
- Conservation and Land Stewardship
- Equine Exercise Physiology
- Equine Reproduction and Growth

Extension:

The MARE Center serves as a national resource for adult and youth (4-H) Extension education. Extension programs strive to improve the wellbeing of our stakeholders and community. Demonstrations, seminars, workshops and field days held by the Center connect the equine industry with the latest science-based information promoting equine and environmental health. Our Extension programs and activities include:

- Best Management Practices Demonstration Farm
- Annual Spotlight on Stewardship: Equine Land Management Symposium
- Pasture walks
- Tours and educational outreach
- Wankopin Community Nature Trail
- Supporting the State 4-H Horse Youth Program

Teaching:

As an innovator in equine science education and international leader in equine research, the MARE Center offers unparalleled learning opportunities for undergraduate and graduate students. The undergraduate internship experience combines a strong scientific program with practical, hands-on training, preparing students as future leaders in the horse industry, academia, or the veterinary sciences. Our educational programs include:

- Undergraduate internships
- British Equestrian Federation internship
- MS and PhD graduate student programs
- 4-H Youth programs

Virginia Tech does not discriminate against employees, students, or applicants on the basis of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. For inquiries regarding non-discrimination policies, contact the executive director for Equity and Access.