

## Ohio House Finance Subcommittee on Agriculture, Development, & Natural Resources Cathann A. Kress, PhD Vice President for Agricultural Administration and Dean, College of Food, Agricultural, and Environmental Sciences

Good morning, Chairman Jones, Ranking Member Troy, and members of the House Finance Subcommittee for Agriculture, Natural Resources and Development. I am Dr. Cathann Kress and I have the privilege to serve as Vice President of Agricultural Administration and Dean of the College of Food, Agricultural, and Environmental Sciences at The Ohio State University. I represent the 408 faculty, 1,305 staff, nearly 3,000 students, over 47,000 living alumni, 11,598 animals, 88 counties, and 11,400 acres that make up our college. We are grateful for the three percent increases for OSU Extension, the Ohio Agricultural Research and Development Centers, and Sea Grant line items in the Governor's budget, which allow us to keep serving Ohioans.

Our college includes three campuses (Columbus, CFAES Wooster, and statewide), OSU Extension and 4-H, multiple academic units including the School of Environment and Natural Resources, 12 research stations that make up the Ohio Agricultural Experiment Station, known as OARDC, and over 100 unique centers, institutes, and programs supporting a breadth of work around food and food systems, a wide range of production, environmental and ecosystem sustainability, policy and economics, and health.

We are committed to scholarship across our three mission areas (teaching, research, Extension) with a commitment to serving our state, as well as our country and world. As a land grant, we are part of a cooperative structure which includes key partners all dedicated to integrating research, education, and extension to improve the food and agricultural sectors, the environment, and the quality of people's lives. We educate not just college students, but over two million individuals across the lifespan. We work to ensure that groundbreaking scientific discoveries are brought out of the laboratory and into the hands of those who can put them to work.

Our "students first" philosophy--our very core--has us leading the university with student success metrics in every category. Our college awards more than \$3.1 million in CFAES scholarships annually—

more than any other college in the university. On top of that, 94.7% of our graduates are enrolled in graduate education or employed within six months of graduation, and our 4-year and 6-year graduation rates exceeded the university's average.

Everything we do happens with student success in mind. We are constructing new facilities on both the CFAES Wooster campus and the Waterman Agricultural and Natural Resources Laboratory and renovating existing buildings for our students to learn in modern spaces with cutting-edge technology. We are also recruiting and retaining the top experts in their chosen fields, so we have the best teachers and mentors shaping our future leaders. In the last year, CFAES has welcomed 21 new faculty members into the college–across nearly all our departments. We also plan to welcome an additional 10 faculty for the Autumn 2023 semester, with over 30 faculty searches currently in process.

With these tools in place, we are helping students gain valuable hands-on experiences, make connections with industry, and develop strong professional foundations for their future careers. Additionally, we are providing the resources for researchers and Ohio State University Extension professionals to pave the way for innovation and discovery, and then to translate and disseminate that knowledge to communities across the state, country, and world.

Increasing enrollment and creating more pathways to agricultural studies is of the utmost importance. Here in Ohio, 1 in 8 jobs are in the fields of food, agriculture, and the environment. Nationwide, the number of jobs and opportunities is much greater than the number of graduates in agriculture and related fields. A recent study by USDA indicates the agricultural, food, and natural resource sectors are experiencing a demand for 59,400 jobs annually for graduates with a four-year degree. Currently, public and land grant universities are only graduating 36,100 per year. We recently experienced this gap firsthand, when the college held a career fair where the available jobs and internship opportunities far outstripped the number of students applying. For us to meet the demands of our industries, we must continue to foster a thriving pipeline to our college for our traditional student populations, as well as those who have not traditionally found careers in food, agriculture, or environmental science.

To this end, CFAES has aimed to increase enrollment by prioritizing early admission notification for early action applicants, including additional consideration in the application review for FFA and 4-H participation, leadership experience, and recognition of skills learned in farming experiences. Our

CFAES recruitment and new enrollment pilot efforts are paying off – admissions are currently up almost 34%, and paid acceptance fees secured from students who intend to enroll are up 59% over last year.

To further enhance educational opportunities for potential students and to meet the needs of Ohioans, we are collaborating with the University of Rio Grande on plans to create pathways for degree programs in animal sciences. We have also been working with Wilberforce University to register students for our online certificate courses in golf course management to create exposure to careers in turfgrass management and the golf course industry.

We are also working to create pathways to agriculture within city limits. Urban ROOTS is an Extension program funded by the Franklin County Board of Commissioners to engage 8th-grade students in immersive educational experiences in agricultural careers. We want these young people to know that agriculture is for everyone—rural and urban. It is the food they eat, the clothes they wear, and the fuel in their vehicles. By exposing 8<sup>th</sup> graders to careers in agriculture, we hope to excite them to the possibility of a career in the food, agricultural or natural resources sector.

We also work directly with the agricultural industry to help solve emerging 21<sup>st</sup> century problems. To help the industry meet the ever-changing concerns of its stakeholders, we have partnered with Nationwide to form the AgTech Innovation Hub. Nationwide and CFAES will work together in this partnership to encourage the development of innovative solutions that will help the agricultural ecosystem while better understanding, managing, and mitigating climate risk. The Innovation Hub will promote applied research, technology transfer, the exchange of knowledge and experience, and transdisciplinary innovation in support of agricultural technology.

Additionally, we hope that our research will be of use to industry beyond planet Earth. Yesterday, we held the ribbon cutting ceremony for Star Lab. The Ohio State University, led by CFAES, will serve as the lead partner for the first-ever science park completely devoted to space research. The brand-new terrestrial analog facility will grant the college unprecedented access to space-related agricultural research, the ability to synergize with partners in industry and across the land-grant system, and the opportunity to engage in additional outreach with K-12 and 4-H students.

Production of food in controlled environment greenhouses, often using soilless and hydroponic methods, will be key to feeding the world in the future. We officially opened our Controlled Environment Agricultural Research Center at our Waterman Agricultural and Natural Resources Laboratory in September. Our researchers are beginning to take up residence, and over \$10 million in funding has already been secured by CFAES for research that will utilize this new complex.

While we have made strides in updating our facilities for crop and food production, building a modern learning center for animal sciences education is also critically important to the future of animal sciences education at OSU. We are well on our way with the fundraising for the Multi-Species Animal Learning Center (MALC). We need \$10 million to meet the goal of obtaining the OSU Board of Trustees' approval of the project in May of this year. The MALC will bring people and animals together, creating so many educational opportunities around animal and human interactions and supporting education for CFAES students across the lifespan.

OSU Extension, the outreach arm of our college, is housed in all 88 of Ohio's counties. In 2022, OSU Extension reached over 2 million lifelong learners. The state investment in Extension provides tremendous return. In fact, the Ohio General Assembly's investment in Extension equates to a little over \$12 per significant educational contact – we can't think of a program in the state that is more cost effective than OSU Extension.

Due to the cooperative nature of Extension, we are able to leverage an additional \$1.40 for our operations throughout Ohio. Each community has priorities and by working with County Commissioners, we have been able to address many of their biggest needs through this cooperative program. Extension features four program areas – Agriculture and Natural Resources, 4-H and Youth Programs, Family and Comsumer Sciences, and Community Development.

One high impact Extension initiative is the Rural Broadband partnership with Broadband Ohio. Last year, we worked with 13 counties across the state of Ohio to help them make the critical decisions they were facing regarding rural broadband. Together with county commissioners, Extension Community Development specialists worked to create plans of action for broadband in rural Ohio communities. We are looking forward to implementing this program on a wider basis with support from the General Assembly. Governor DeWine's budget for the Department of Agriculture excluded funding for the Farm Financial Management and Policy Institute, which is housed within Extension. The goal of the institute is to share resource-based knowledge and best practices to help Ohio farmers manage their businesses as the agricultural industry changes and evolves. We request continued funding this biennium for the institute. We were able to establish the institute over the last couple of years and we are excited about the early results. One of the biggest wins for the program is the creation of the Beginning Farmers' Program class certification. The creation of the class certification will provide beginning farmers the opportunity to pursue tax breaks in the Beginning Farmers program passed by the General Assembly in 2022.

Extension and CFAES also offer other tools meant to improve business and yield outcomes for farmers. Our eFields and eBarns programs are dedicated to advancing agriculture through field-scale research and digital ag. With eFields, we utilize modern technologies and information to conduct research with an educational and demonstration component to show farmers how precision agriculture can improve efficiency and profitability in crop production. eBarns takes a similar approach, focusing on research and digital ag technologies that will help farmers enhance livestock production and the growing of forages for livestock, as well as nutrient management practices. Research trials for both programs are conducted throughout the state with the cooperation of local producers, and the results are published in annual reports available to the public.

Extension also works to help people outside of the field, barn, or office. OSU continues to work with state and local partners to provide demand-driven training and preventative education in mental and behavioral health, particularly in rural areas where education and care is underprovided. With a grant from USDA, OSU Extension has helped health care practitioners and mental health services professionals better understand the challenges of farming and familiarize them with the unique stressors impacting farm and rural families. OSU Extension specialists engaged over 1000 professionals in this program and fully certified 800 professionals in the span of one year.

We are also working to protect the health and safety of Ohioans in other ways. During the pandemic, we established an Emergency Response team within the college to address challenges related to the food and agricultural production systems. This team played an integral role in preparing for the challenges facing the state with the outbreak of Avian Influenza last year. By working closely with Ohio EMA, the

Ohio Department of Agriculture and other state entities, Extension was able to provide trusted scientific information to help state agencies meet the challenge. Additionally, we continue to engage in other potential threats to our crop and livestock systems. On our CFAES Wooster campus, the Plant and Animal Agro-security Research Facility is one of three bio safety level 3 labs in the United States. It provides us with a unique ability to work on vaccines for diseases like African Swine Fever and Avian Influenza.

In the wake of the train derailment in East Palestine, Extension has worked closely with EMA to help answer questions from farmers, community members, and public decision makers. We have also worked to ensure the public has the resources needed to contact independent organizations to ensure food, water, and human safety. We have leveraged specialists throughout CFAES and OSU to provide research and support including toxicologists who specialize in food safety and agricultural production. We commend all of our researchers and Extension educators for being responsive to their community needs.

During my second term as Dean, our college will focus on making the Buckeye Dream a reality for any Ohioan, growing faculty numbers and eminence in key priority areas, improving priority physical spaces and college processes, and increasing the engagement, investment, and return for Alums, Stakeholders & Partners.

But it takes partners- it's not possible to do any of the types of complex, systems work that we focus on as individuals. To fulfill our purpose – to sustain life – means we need so many of you to join us. We are deeply grateful for your support, your partnership, and that you believe in our capacity.

In order to meet our goals, we will continue to look for ways to expand our reach and find ways to support our mission. Almost 80% of our graduates stayed in Ohio in 2022, up from about 75% in 2021. In 2022, we received gifts from over 11,300 donors with over 1,200 being new donors to the college. Despite that, we need your help and support in the budget for the animal learning center, Extension, and Agricultural Research to ensure our current trajectory.

Thank you again for the opportunity to speak on behalf of CFAES and The Ohio State University. As a Land-Grant institution, The Ohio State University has a significant legacy of impact and leadership in

Ohio's agricultural industry, but we must continually seek ways to broaden that impact. Thank you, all, for your dedication to this work. After all, our work is the ultimate work. We sustain life.