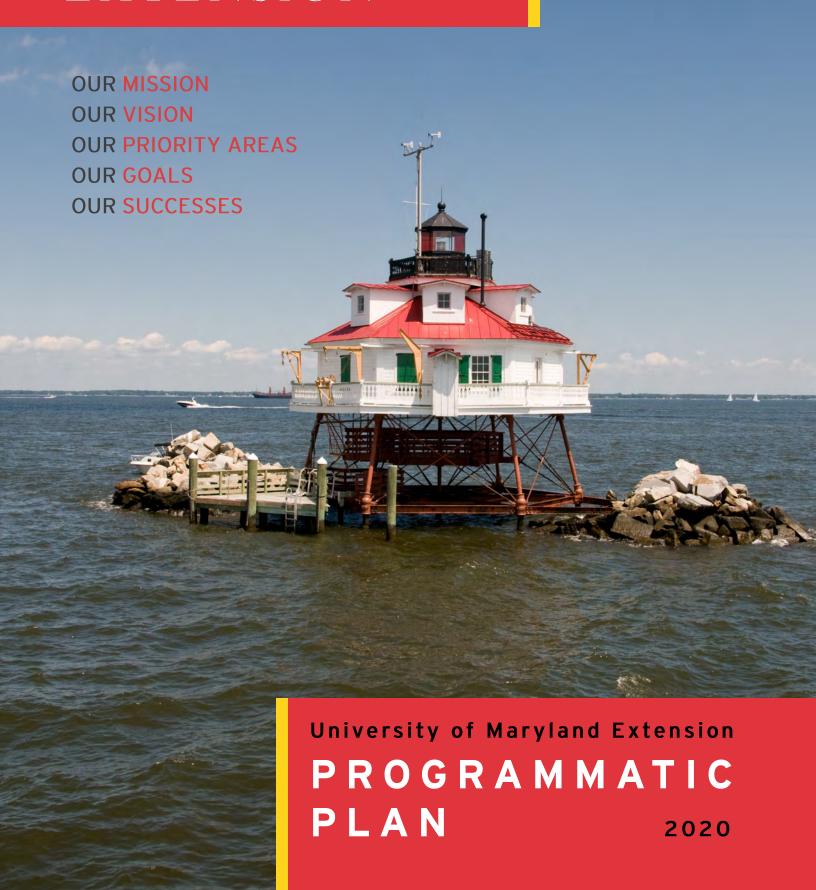
UNIVERSITY OF MARYLAND EXTENSION



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University of Maryland Extension (UME) is the largest department of the College of Agriculture and Natural Resources (AGNR) with over 300 faculty and staff. UME was born from the 1914 Smith-Lever Act of Congress that directed the local land grant universities to provide non-formal educational programs, based on credible scientific research, for the residents of the state. To reach Marylanders, UME maintains offices in all 23 counties and the city of Baltimore. This extension network disseminates information, provides teaching opportunities, engages with community stakeholders to share knowledge, and administers services so as to create economic growth, community development, improved human health, enhanced environment, and wise use of our natural resources – within an approach that values diversity, equity, and inclusion. It is through the following four program areas under the direction of their program leaders that we deliver our mission:

- Agriculture and Food Systems
 Darren Jarboe, PhD, MBA
- 4-H Youth Development Nia Imani Fields, EdD
- Family and Consumer Sciences Jinhee Kim, PhD
- Environment and Natural Resources Bill Hubbard, PhD

In the following document, our program leaders have stated their program's, mission, vision, priority areas, strategic goals, and hallmarks of success of each program area. It is through their leadership and the efforts of faculty, staff, and stakeholders that our mission is far reaching and that we want to share this with you.

We invite you to become involved in whatever way you find possible and to celebrate Extension in Maryland.

Jim Hanson, Professor

Jun Hausen

Associate Director/Associate Dean, University of Maryland Extension



AGRICULTURE AND FOOD SYSTEMS

PROGRAM DESCRIPTION

The University of Maryland Agriculture and Food Systems (AgFS) Extension Program serves the leading private industry in the state. In 2017, the market value of Maryland crops and livestock sold exceeded \$2.4 billion and contributed \$8.25 billion to the Maryland economy. The AgFS Team conducts applied research and provides educational programs for production and marketing of grains, oilseeds, horticulture, floriculture, poultry, dairy and beef cattle, sheep and goats, equine, and other livestock, helping producers adopt new technologies and practices to improve profitability. As an example, Maryland agriculture has worked to conserve resources and improve water quality through new management practices such as cover crops and nutrient management planning.

Photo: Urban Agriculture, Cultivate Baltimore: Soil health and pest ID, June 2019

AgFS Mission

The mission of the Agriculture and Food Systems (AgFS) Extension Program is to conduct applied research and provide research-based educational programming to increase producer profitability while conserving resources by using cutting-edge technologies and practices.

AgFS Vision

The AgFS Extension Program will be an aggressive leader in agriculture and food systems applied research and research-based educational programming that strengthens Maryland agriculture and producer profitability.

AgFS Priority Areas

To meet the needs of Marylanders, the AgFS Extension Program has identified and will focus on the following priority areas:

- Manage herbicide resistance
- Build consumer understanding of agriculture
- Agricultural entrepreneurship
- Urban agriculture
- Poultry
- Industrial hemp

AgFS Strategic Goals

- Find strategies to combat herbicide resistant weeds and develop multi-faceted approaches to address the problem
 - Educate farmers and agricultural service providers about new tools and strategies for controlling these weeds
 - Conduct applied research on products and management strategies to control herbicide resistant weeds
 - Work with government, industry, and other stakeholders to develop a strategic plan to address these weeds and support researchbased responses, positioning University of Maryland to lead the region
 - Develop new products, product delivery methods, and management strategies to control herbicide resistant weeds and adapt machinery from other industries to manage these weeds



Industrial hemp plant research plot located at the Wye Research and Education Center in Queenstown, MD.

- Research-based results need to be communicated to consumers using a variety of media channels to build their understanding of agriculture
 - Create an overarching AgFS communication strategy to educate consumers and execute the strategy
 - Add faculty and staff with the expertise to execute the AgFS communication strategy
 - o Update and reorganize information on the AgFS portion of the UME web site
 - Work with agricultural and non-agricultural organizations to expand the reach of the AgFS offerings (take advantage of being STEM)
 - Develop infrastructure that aggregates the social media efforts of all AgFS faculty and staff and creates a central access area for consumers
- Build the agricultural entrepreneurship program to have greater economic impact on Maryland and the Mid-Atlantic Region
 - Use the Extension network to connect with communities across Maryland to support agricultural technology development and commercialization
 - Partner with organizations and stakeholders in the entrepreneurship community to create a culture that supports agricultural entrepreneurship by developing a network of resources to accelerate technology commercialization
 - o Develop and provide training programs that increase the speed of development, allowing startups to reach milestones quicker and vet ideas faster
 - Work with stakeholders to identify, develop, and promote best practices for establishing and operating an agricultural technology incubator/accelerator

Broiler chicken research in University of Maryland, College Park, MD.



- Expand the urban agriculture program in Maryland
 - Conduct research on the progression of farm businesses, quality of products, and food availability in urban communities, particularly fresh fruits and vegetables
 - Work with farmers to develop growth strategies that offer a pathway to full-time farming and employment of local residents
 - Create a team of Extension professionals to serve the needs of these farmers, local consumers, and their communities
 - Continue to promote and offer science-based services such as soil and water testing
 - Collaborate with stakeholders to develop a strategic vision for urban agriculture in Maryland and the District of Columbia-Maryland-Virginia region.
- Conduct applied research and educational programs for the poultry industry
 - Conduct applied research on poultry production and management, poultry litter utilization, organic production systems, and other poultry issues
 - Develop and provide educational programs based on the applied research findings above
- Support development of the hemp industry with applied research and research-based education
 - Conduct research on varietal development, soil health impacts, nutrient requirements, and production and business management practices
 - Work with partners to develop quick, easy to use testing protocols for plant composition
 - Assist partners with development of a hemp processing and marketing industry

AgFS Hallmarks of Success:

- Producers are able to manage herbicide resistant weeds effectively and cost efficiently
- Consumers will better understand Maryland's food, feed, and biorenewables production systems
- The agricultural entrepreneurship ecosystem grows to better support business and community development
- Urban agriculture has strong, profitable growth in Maryland
- Support continued growth of the Maryland and Delaware– Maryland-Virginia poultry industry
- Maryland develops a sustainable, profitable hemp industry



Corn Harvest from above on the Eastern Shore of Maryland



4-H YOUTH DEVELOPMENT

PROGRAM DESCRIPTION

Maryland 4-H is the youth development program of the land grant and Extension system. More than 51,000 youth, and 3,000 volunteers engage in Maryland 4-H annually. 4-H youth learn life skills through community focused, research-based experiential education programs. High quality science, civic engagement, and healthy living programs are delivered through clubs, afterschool and school programs, camps, fairs and other community partners. Youth development professionals and volunteers support youth thriving through nurturing sparks, promoting high quality experiences, and cultivating positive relationships within communities.

Photo: 4-H Military Robotics Camp 2015

4-H Mission

The Maryland 4-H Youth Development Program provides a supportive and inclusive setting for all youth to reach their fullest potential in a diverse society. Youth learn beneficial and cognitive life skills through community focused, research-based experiential education programs.

4-H Vision

Maryland 4-H aspires to be recognized as a leader in youth development, inspiring youth and adults to learn, grow, and work together as a catalyst for positive change.

Additionally, National 4-H has made a promise to America's Kids that by 2025, 4-H will reflect the population demographics, vulnerable populations, diverse needs and social conditions of the country. This vision has the elements of inclusion, caring adults, serving at minimum 1 in 5 youth, and the volunteers and staff reflect the diversity of the population. Nationally 4-H provides programs focused on Civic Engagement, Healthy Living & 4-H Science (STEM).

4-H Priority Areas

To meet the emerging needs of diverse youth across Maryland, we have identified the following six priority areas:

- Building Community & Civic Engagement
- Developing Leadership Skills for Life
- Nurturing Social Empowerment & Resilience
- Improving College & Workforce Readiness
- Fostering Exploration & Creativity in Arts & Sciences
- Promoting Healthy Lifestyles & Self-Acceptance

Maryland 4-H will aim to reach these priority needs through:

- 4-H Clubs
- High-quality, Short-Term Experiences
- 4-H Practitioners (Educators & Volunteers)

4-H Strategic Goals

To address the needs of Maryland's youth through 2025 and beyond, 4-H should focus on:



4-H face painting at Maryland Day, College Park, MD.



4-H Forum

- High quality and culturally relevant youth development programs that foster youth thriving
 - Enhance the rigor of youth development research and national scholarly contributions to explore youth thriving
 - Identify the current programmatic needs and trends among youth in rural, urban and suburban communities throughout Maryland
 - Value our historical 4-H foundations in agriculture while opening doors for contemporary priority needs in Science, Healthy Living and Civic Engagement
 - Bridge and value the rural and urban interface by fostering communication and collaboration that leads to mutually beneficial outcomes
 - Expand community development efforts that engage youth in local decision making and sustainable projects that strengthen communities
 - Expand environmental stewardship resources and efforts that contribute to a cleaner Chesapeake Bay and environment
 - Enhance STEM partnerships and initiatives to cultivate interest and preparation for college and careers
- Increasing new generations of volunteers and partnerships through intentional collaborations with local colleges and universities, schools, businesses and other community agencies
 - Educate and communicate 4-H volunteer opportunities and benefits to 4-H alumni, families and community
 - Develop new and expand existing partnerships to increase programmatic expertise and broaden career exploration and other opportunities for youth
- Enhancing the Maryland 4-H brand and marketing efforts to engage diverse audiences and highlight the breadth of 4-H program opportunities
 - o Develop high quality and consistent marketing materials to promote local and statewide opportunities
 - Increase Maryland 4-H presence in social media and distance technologies

4-H Hallmarks of Success

- Increased engagement and diversity among the community club program, outreach programs, recognition opportunities, and 4-H expanded experiences (i.e. national/international trips)
- Increased engagement of 4-H volunteers and partners that reflect the demographics of the state

- Increased collaboration with UMD campus departments (shared expertise, research, and internship opportunities)
- Demonstrated programs with high quality and relevant STEM programming (i.e. ag literacy, animal science, maker spaces, aerospace, robotics, computer science, etc.).
- Enhanced programming to support community engagement, leadership, civil dialogue, and advocacy
- Demonstrated programs with high quality healthy living programs that foster mental wellness and resiliency
- Increased development of opportunities that foster creativity through the arts
- Evidence of environmental stewardship efforts that contribute to a healthy environment and Chesapeake Bay
- Enhanced marketing and visibility through a unified Maryland 4-H brand campaign
- Diversified funding sources to sustain innovative programs
- Evidence of youth thriving and scholarly contributions to the field of positive youth development

Maryland Governor Hogan visiting 4-H booth at the Maryland State Fair.



University of Maryland Extension: Programmatic Plan 9



FAMILY AND CONSUMER SCIENCES

PROGRAM DESCRIPTION

The University of Maryland Family & Consumer Sciences (FCS) strives to ensure that all Maryland residents are healthy and economically successful at every stage of life through education, research, and outreach programs. We accomplish this by working with youth and families to prevent and manage chronic diseases through healthy food and physical activity choices, handling food safely, having financial literacy, health insurance literacy, and safe and healthy places to live, work, play, and learn. We help people acquire knowledge, skills, and confidence necessary to make informed decisions that affect their health and economic well-being. We help them identify health risks and then make a plan to reduce those risks. We help people make choices that reduce debt, increase savings for emergencies and long-term goals, and make spending plans based on how much they earn and what their expenses are. We work with adults, young people, schools, organizations, businesses, and communities. We develop partnerships to maximize our expertise and outreach. Our work is based on the latest research from the University of Maryland and other institutions is aimed to influence policy, systems, and environmental changes.

Photo: Food preservation training-canning

FCS Mission

The University of Maryland Extension Family and Consumer Sciences (FCS) Programs strengthen and transform individuals, families, and communities by providing research-based educational programs focusing on nutrition, financial management, health insurance literacy, and food safety and preservation. FCS aspires to be the leader in providing programs in promoting the health and well-being of individuals, families, and communities through education, research, and outreach.

FCS Vision

UME FCS ensures all Maryland residents achieve healthy living and economic success across the life span.

FCS Priority Areas

To empower Maryland residents to achieve healthy and prosperous living, FCS focuses on four priority areas. In each priority area, FCS provides high-quality educational programs that are based on or informed by research, conducts applied research, and informs policy affecting families and communities:

- Nutrition, Health, and Wellness (NHW): To create a
 health-promoting environment and to reduce
 modifiable lifestyle risk factors by helping youth and
 adults develop and maintain healthy eating habits
 along with the physical activity
- Financial Capability and Wellness: To help youth and adults increase wealth and achieve financial wellbeing by managing money wisely, making informed financial decisions, increasing short and long-term savings, managing credit, and setting and working toward short and long-term financial goals
- Food Safety and Preservation: To decrease the incidence of foodborne illnesses from occurring through promoting the understanding and adoption of safe food production, handling, and preservation practices by consumers, processors, farmers, and growers
- Health Insurance Literacy: To help consumers access and manage their health care wisely by increasing the ability to evaluate the information, choose and use their health insurance

FCS Strategic Goals

FCS focuses on internal and external partnerships and expands the capacity of local and state communities. FCS values interdisciplinary approaches in addressing complex and vital issues affecting Marylanders. FCS is committed to diversity and inclusion and strives to meet the diverse needs



Delivering *Fresh Conversations* at the senior center in Queen Anne's County, MD. Photo credit: Patsy Ezell

using innovative teaching and learning approaches. FCS aspires to become a catalyst for change and contributes to creating a safe and healthy environment for all Maryland residents.

- Strengthen partnerships at national, regional, state, and county/community levels
 - Identify the programming needs and resources of the community using science-based methodologies
 - o Develop partnerships that have goals aligned with FCS program priorities and strategic goals
 - Provide more coordinated and synergistic efforts in addressing critical issues
- Interdisciplinary Approach
 - o Develop creative and holistic programs to address complex issues
 - Develop multi-disciplinary teams to bring diverse and innovative perspectives
 - Deepen the collaborations with other academic units and institutions
- Promote and ensure equal access to our programs and research
 - Implement inclusive Extension programs that meet the needs of diverse and underserved audiences
 - o Ensure program evaluation and applied research are culturally responsive and inclusive
 - o Increase access to our programs for diverse and underserved audiences
- Expand our reach by better engaging our audience through train the trainer and volunteer programs
 - Enhance train the trainer programs by diverse topics and delivery such as online learning
 - o Create Extension champions by providing effective peer models through volunteer programs

Market To Mealtime nutrition education at Takoma Park Crossroads Farmers Market.



- Engage Learners with Diverse and Innovative Program Approaches
 - Expand current programming with technology and innovative approaches to reach new and diverse audiences
 - Develop program evaluation strategies to assess program effectiveness of diverse approaches

FCS Hallmarks of Success

- Increased numbers and types of partnerships at national, state, and local levels
- Increased referrals, co-branding, and joint projects
- Increased visibility, reach, and credibility
- Increased numbers and types of collaborative interdisciplinary teams (multi-programs, multi institutions, multi-disciplines)
- Increased amounts and types of resources and funding
- Increased the program reach, distribution/dissemination, and program impacts
- Enhanced cultural competencies of FCS educators, trainees, volunteers, and stakeholders by providing training and programs
- Increased established collaborations and partnerships with organizations to serve diverse audiences
- Increased diversity of venues/locations, partnerships, and participants
- Increased champions from different communities
- Increased numbers and diversity of trainees/volunteers and consumers reached by the trainees/volunteers
- Enhanced competencies and confidence of trainees and volunteers
- Improved engagement of the audiences and program outcomes
- Increased competencies of FCS faculty in understanding the needs of diverse learners and implementing innovative and effective approaches
- Increased numbers and types of programs in reach, audience, delivery subjects, and topics
- Enhanced program outcomes documented by utilizing appropriate evaluation strategies



Maryland EFNEP program is teaching children how to make an easy, yummy veggie hummus wraps. Photo credit: Kavitha Sankavaram



ENVIRONMENT AND NATURAL RESOURCES

PROGRAM DESCRIPTION

The University of Maryland Environment and Natural Resources (ENR) Extension Program helps sustain Maryland's rich environment, including its diverse habitat and abundant natural resources. From coastal beaches to the Chesapeake Bay to forested mountains, our rural, wildland, and urban ecosystems are of immeasurable value to our residents and require diligent stewardship to maintain their richness. Along with the Sea Grant team of educators, ENR works to inform and equip individuals and communities to implement research-based conservational use, protection and, where appropriate, preservation of natural resources. This program area focuses on aquatic resource management, energy conservation, coastal and inland resiliency, forest and wildlife management, homeowner horticulture and gardening, water and watershed management, green infrastructure and sustainable living, and environmental and natural resources literacy.

Photo: Phragmites project on Maryland's Eastern Shore aims to control the spread of impact of invasive species through research and Extension efforts. Photo credit: Andrew Baldwin

ENR Mission

The University of Maryland Extension Environment and Natural Resources (ENR) Programs strengthen and improve individual's knowledge, skills and aspirations to make changes in their lives and the lives of others that positively affect the economy, the environment and the associated natural resources for current and future generations.

ENR Vision

The UME ENR Program is the state's premier educational leader that provides science-based solutions in an inclusive manner that ensures the economic, social and environmental sustainability of Maryland's natural, coastal and water resources.

ENR Priority Areas

Stakeholder feedback and a review of state, regional and national issues have provided a host of issues that affect various stakeholders in the environment and natural resources programming areas. These issues have been grouped into eight major programming areas summarized below:

- Climate, Coastal Resiliency, Flood Preparation, Saltwater Intrusion, and Sea Level Rise
- Home and Community Level Environmental Landscaping and Green Infrastructure
- Water Quality, Water Quantity and Watershed Management
- Wildlife Damage and Improving Wildlife Habitat for Desirable Species
- Sustainable Living (Energy, Green Building, etc.)
- Natural Resource Based Education for Youth and Adults
- Healthy and Productive Forests and Forestry Industries
- Safe and Productive Aquaculture and Seafood Industries

ENR Strategic Goals

- Expand our reach and ensure equal access
 - Identify the Extension and education needs of stakeholders using science-based methodologies that ensures inclusivity and parity



Watershed Restoration Specialists conduct an educational program on the Choptank River.



Woodland Stewards Training at the Western Maryland Research and Education Center, Keedysville, MD.

- Enhance train-the-trainer, volunteer, online, peer-topeer, and other innovative programming alternatives
- Incorporate an interdisciplinary approach to solving complex natural resource and environmental issues
 - Develop creative and holistic programs to address complex issues
 - o Develop multi-disciplinary campus, field and countybased teams to bring diverse and innovative perspectives to addressing critical issues
- Strengthen local to national partnerships
 - Develop partnerships with those whose goals are aligned with ENR program priorities and strategic goals
 - Deepen collaborations with other academic units, institutions, agencies and federal, state, local and NGO partners
- Utilize available tools and methods to quantify the impacts of UME Extension programs
 - Engage ENR faculty at both the state and local level in joint learning activities related to understanding program evaluation and marketing
 - Provide resources and training to faculty in the area of program evaluation and impact reporting

Hallmarks of Success

- Increased cultural capacity and awareness of ENR faculty, staff and volunteers
- Increased engagement from and diversity in program participants and impacts
- Expanded and higher quality online learning opportunities
- Increased partnerships, funding and recognition amongst critical ENR networks
- Meaningful program outcomes and impacts
- Strong evidence of interdisciplinary solutions to complex environmental and natural resource issues





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Front cover photo: The Drum Point Lighthouse and a boat along the dock of the Calvert Marine Museum, Solomons Island, Maryland.

Photographs that are not noted in this publication were taken by Edwin H. Remsberg.

