Letter from the Chair

Danielle Morvan (Soph., Plant & Soil Science) won a cash award for her oral presentation on the effects of eutrophication on eelgrass growth at the National Minorities in Agriculture, Natural Resources, and Related Sciences (MANRRS) conference in Birmingham, AL in March. MANRRS is a national society with the objective of promoting academic and professional advancement of minorities in the fields of agriculture, natural resources, and related sciences (www.manrrs.org).

Morvan had been working under the guidance of Drs. Arthur Allen and Fawzy Hashem. Eelgrass is a form of submerged aquatic vegetation found in many marshlands near areas such as the Chesapeake Bay. It provides food and shelter for many small marine animals and helps to prevent soil erosion. Levels of eelgrass in the bay are declining due to eutrophication. Eutrophication is a condition in an aquatic eco-

system where high nutrient concentrations stimulate the growth of excess algae.

The UMES MANRRS chapter will host the Region I Workshop here Nov. 16-17. Students from Cornell, Delaware State, Howard, and Penn State universities as well as from the University of Connecticut, UDC, and UMCP are due to attend.

It is a special pleasure to welcome our new and returning students. May this semester be filled with memorable learning experiences, health, and fun. I say “fun,” of course because that’s what learning should be about. Congratulations to our recent graduates, and to all alumni: best wishes in your professional and personal endeavors!

In this issue you’ll learn about some of our students’ summer experiences in study abroad, internships, and at professional meetings. Faculty and staff continue to be awarded grants enabling them to engage students in activities that prepare them for their careers and also to entice K-12 students with early learning experiences in geospatial information technology, ornamental horticulture, and other facets of agricultural science. Two current undergraduates are also helping to educate the public with their award-winning essays about the appeal of a career in agriculture.

I am particularly grateful to our students, faculty, staff, and our USDA liaison officer who support the department by the example of their own efforts and by encouraging others to learn about the many rewards of work in the field of agriculture.

With best wishes,

Lurline Marsh
Department hosts Envirothon statewide competition

This summer, UMES hosted the 2007 Maryland Envirothon, a state-wide competition for the best and brightest high school students in Maryland. Most counties sent a team to the event, including Somerset. Frederick County’s team ended up with first place overall, based on written tests, presentations, and applied abilities to address environmental challenges. Drs. Niki Whitley and Jurgen Schwarz coordinated the use of the department’s facilities, primarily the Food Science and Technology Center, where the event was based, and campus farm areas. ♦

FFA Public Speaking Contest

Dr. George Shorter coordinated the FFA Region V public speaking contest in March that brought high school students from throughout the Eastern Shore to UMES. Competitive categories included prepared and extemporaneous speaking, job interview, and the FFA creed. ♦

New and noteworthy

Gladys Shelton, Ph.D., has been named Interim Dean and 1890 Research Director for the School of Agricultural and Natural Sciences. She was most recently the chair of the Department of Family and Consumer Sciences at North Carolina A&T State University in Greensboro, NC. Dr. Shelton holds a bachelor’s degree from North Carolina Central University in Durham, NC. She earned her master’s from Cornell University in Ithaca, NY and a doctorate from Virginia Polytechnic Institute and State University in Blacksburg, VA.

Stephan Tubene, Ph.D., is the department’s newest faculty member. He specializes in Ag Economics. A native of the Democratic Republic of Congo (DRC), Dr. Tubene comes to UMES most directly from Southern Maryland, where he worked for Maryland Cooperative Extension. He headed a Small Farm Institute that targeted limited-resource farmers. He earned a B.S. degree from the Institut Facultaire des Sciences Agronomiques in DRC, his M.S. from Alcorn State University, and his Ph.D. from Kansas State University. Dr. Tubene’s work in developing niche markets for ethnic vegetables was recently the subject of a lengthy feature article in the “Washington Post” newspaper.

Ejigou Demissie has taken on the task of serving as Acting Coordinator of the UMES graduate program. He will continue to teach in the department, splitting his time between Trigg Hall and the Early Childhood Research Center, where the graduate program is housed.

Carolyn Brooks was honored with an award from the American Society of Microbiology at its annual meeting in Toronto in May. The William A. Hinton Research Training Award recognized Dr. Brooks for her many years of devotion to increasing the enrollment of under-represented minority students in microbiology and mentoring them to success. A few months earlier Dr. Brooks was honored as One of Maryland’s Top 100 Women at the Meyerhoff Center in Baltimore. After serving for several years as UMES’s Dean of the School of Agricultural and Natural Sciences and 1890 Research Director, Dr. Brooks accepted the position of Executive Director for the Association of Research Directors of the 1890 Land Grant Universities. Her office and phone number at UMES remain the same. An evening of appreciation for her 25 years’ service to UMES was held in early October.

Regretfully, the department said farewell this summer to Okeleke Nzeogwu, who taught economics in the Agribusiness program. Dr. Nzeogwu has taken a position at the University of Southern Nevada as director of the MBA program and a professor of economics. ♦
Anyone familiar with the enthusiasm faculty member Arthur Allen brings to his water quality research will not be surprised to learn that he caught the Governor of Maryland’s attention when the latter toured the campus this April. Gov. Martin O’Malley, President Thelma B. Thompson, and other elected officials had a chance to learn about Dr. Allen’s tests of a method of injecting manure into the soil to see if it will result in more or less nutrients in streams. Dr. Allen is also studying drainage ditch management and other ways to track and trap phosphorus and nitrogen to minimize their impact in the watershed. Dr. Allen and his work at UMES was featured in the nationally-circulated USDA/ARS monthly magazine “Agricultural Research” (Vol. 54, No. 11-12, pp 14-15). The article described the large, multi-university, multi-agency effort to monitor the Chesapeake Bay and find solutions to serious water quality problems. Dr. Allen’s partners include the USDA/ARS units at the University of Arkansas, Penn State and Auburn universities, and the University of Maryland College Park.

University Trial Garden

A University Trial Garden was created in June 2007 to evaluate the landscape performance of floral bedding plants on the lower eastern shore. Ms. Corrie Cotton, Project Investigator, developed the garden to provide information to enhance the profitability of the lower shore region’s green industry and improve the quality of life for residents living in this area.

Trial gardens enhance ornamental horticulture by providing commercial plant growers, plant breeders, retailers, and the home gardener with unbiased evaluations of plant cultivar performance under local growing conditions. Selecta First Class, Inc. and Ball Horticultural Company donated seeds and rooted cuttings of new flower varieties. One hundred and twenty popular bedding plants such as petunias, geraniums, verbena, impatiens, salvias, and vincas were evaluated. The PI, four undergraduate students in the department, and Ginny Rosenkranz, Commercial Horticulture Extension Agent for Wicomico, Somerset, and Worcester Counties conducted the evaluations.

The flower trial garden was also created to enhance course instruction of agricultural classes and to attract UMES students and the local community to the UMES Agriculture Experiment Station. An open house was conducted on Wednesday August 1, 2007. Home gardeners, master gardeners, landscape professionals, and nursery and greenhouse growers attended the open house. They, too, conducted an evaluation of the bedding plants.

The University Trial Garden is funded by USDA/CSREES. Trial gardens will be conducted for at least two more years.
Brittany Butler
(Sr., Animal Science)

During summer 2007 I interned at the Veterans Affairs Medical Center in Washington, DC, working in the Office of Research Oversight under Susan Harper, D.V.M., M.S. She gave me a project to create an online training module for sheep and goats that would serve as a crash course for anyone who was going to engage in a research project dealing with sheep and/or goats and needed quick, up-to-date, and easily accessible information.

I was given a list of topics to cover, such as regulatory requirements, general anatomy and physiology, general behavior, general husbandry requirements, and common techniques (restraint, blood collection, injections). I was given some freedom to talk about topics I found interesting, so I added information about gestation, breed types, and common diseases.

It took about a month to research all the necessary information and actually put it together in one document (I was interning at the medical library as well). When I had my draft done, I gave it to Dr. Harper and she took it to the USDA for further revision. I was then told to find illustrations and to create a quiz to go along with the module. After I incorporated pictures and the quiz and had the whole thing approved, I made a PDF file so the module could be uploaded to the internet, where I will be given credit for my work.

The internship was of great benefit to me. I have volunteered at the DC VA since I was thirteen and have been doing paid internships there since the summer of 2006.

Dr. Harper said she was glad to have my help because of my experience with livestock. Initially, she gave me the choice between cattle or sheep and goats, so I choose sheep and goats with which I had the most experience. I was happy to be able to help her catch up on some of her projects and at the same time gather valuable experience.

Robert Patterson
(Jr., Plant & Soil Science)

For summer 2007 I was selected as a student researcher by the Department of Biological Sciences at Florida International University in Miami. During my 10-week internship, I conducted biomedical research under the mentorship of Dr. Kalai Mathee, an associate professor of microbiology at FIU. The intended focus of our work was to test 96 clinical isolates of Pseudomonas aeruginosa for their resistance to specific antibiotics.

Overall, my visit to Miami was a great experience. Aside from performing reactions in the laboratory, I spent my leisure time networking among the student leaders and campus organizations, actively participating in campus events. After this wonderful experience, I am considering FIU for graduate school.

Shannon Uzelac
(M.S. student)

For my internship, I worked in the Somerset County Extension Office with the 4-H program, helping at the Somerset County Fair and the Maryland State Fair to run the livestock shows. I showed for the UMES Farm at the Somerset and Washington county fairs. I also showed for sheep producers at the Washington, Howard and Montgomery county fairs. I judged dairy cattle at the Somerset County fair, dairy goats at the Wicomico and Garrett county fairs, and the 4-H Fashion Show at the Maryland State Fair.

This helped with the 4-H Youth Skill-a-Thon at the Maryland Sheep and Wood Festival. This coming year I will be teaching livestock programs to 4Hers in different counties in Maryland.

Rachel Andrews
(Sr., Gen. Ag. and HRM)

This summer I had the opportunity to work with UMES faculty on several research projects. The most rewarding project was the Trail Garden run by Ms. Corrie Cotton. I worked with her and other students to create a garden environment in which we tested the effects of nature on new varieties of ornamental plants. Every other week, we walked through the garden and scored each plant type based on flower color and number, foliage health, insect and disease resistance, and overall landscape performance. Thanks to this experience, I became familiar with several new ornamental cultivars, and I learned about soil preparation, irrigation, and weed control.

Simone Tomlinson
(Jr., Animal Science)

As a USDA 1890 Scholar, during my four years of school I must complete an eight-week internship with a USDA office pertaining to the agency that funds my education. This was my second summer with the APHIS VS office located in Annapolis, MD.

This summer I was mentored by UMES alumna, Brianna Wilson, who is also part of the program and worked here for the summer.

Throughout the eight weeks, she showed me the various activities one
In summer Maryland's slaughterhouses, then disecting brain steams and retroverginial lymph nodes to send to the national lab in Iowa. The lymph nodes and brain stem were then tested to see if any goats were carriers of scrapie. Other activities I did this summer were inspect state fairs, track deer with the U.S. Fish and Wildlife Service, and capture geese that damage private property in the DC metro area. My internship was very eventful, to say the least!

Samuel Mwangi (Jr., Agricultural Studies)

In summer 2007, I had an opportunity to work with Dr. George Shorter on a special topic: agricultural engineering. This gave me hands-on experience in electrical wiring. In this course I was able to do wiring in university-owned poultry houses. The wiring work included upgrading electrical equipment to reduce risk of electrical fire, which could be from dust that clogs in sockets and bulb holders. I was also able to wire the bulbs to use electricity more efficiently, i.e., so that during the day, in the brood chamber, every other bulb would light, instead of every bulb.

From this project I was able to build confidence in electrical wiring and maintaining electrical appliances.

GIS workshops challenged high school and undergraduate students, who excelled

Once again this summer the department provided high school and undergraduates with valuable, hands-on training in Geographic Information Systems (GIS) and Global Positioning Systems (GPS). With funding awarded to Program Administrator Arthur Allen, the high school students received paid internships that provided two weeks' instruction in the UMES Geotech laboratory, supervised by Ms. Tracie Earl. Three UMES undergraduates also received paid internships and training in geospatial technologies, but their internships continued out in the "real world" where they used their new learning in work on campus or with a local agency during the summer.

This year's undergraduate interns were Karl Binns, Agribusiness; Nathan Collier, Plant and Soil Science; and Dana McNair, General Agriculture.

Binns spent his summer with the Somerset County Roads Department. His project was to locate and map all the drainage pipes that traversed each of the roads in Somerset County. He would subsequently GPS the location of either end of the pipe and enters the coordinates into a GIS dataset. He used aerial imagery to improve the accuracy of GPS data and entered attributes for each feature. The Somerset County Roads Department will use this dataset to more efficiently maintain these pipes.

Collier interned with Ms. Corrie Cotton in the UMES Department of Agriculture. His project was to locate individuals who potentially used wells as their primary source of water. He analyzed several GIS datasets from "MdProperty View" and the US Census to locate residential areas that are outside city limits that probably do not use city water. This information will be used for future outreach purposes for the UMES Drinking Water Project.

McNair had the opportunity to intern with the UMES GeoTech Lab and the Somerset County Department of Emergency Services. The first portion of her internship was to assist with the UMES Summer High School Geospatial Information Technologies Internship Program. The second portion was spent locating 911 addressing errors in the Somerset County Emergency Services dataset. Ms. McNair used lists of updated addresses from the Department of Emergency Services, and compared them to the digital spatial dataset. She spatially logged errors she discovered and included a description of the error in the attributes. This information was subsequently forwarded to Emergency Services for incorporating into their main system.

Each student presented slide shows and posters at the end of their internship to departmental faculty and agency personnel where they interned. The USDA Capacity Building Grants Program, the UMES ACTION Program sponsored by the National Science Foundation, and the UMES Department of Agriculture provided funds and support for this effort.
Student Essays Win Trip to DC

Essays by two juniors in the department resulted in their being invited to Washington DC by USDA Agriculture Secretary Mike Johanns.

Meredith Esguerra and Kristen Walker each wrote an essay entitled, "Why I want a career in agriculture," and were among 11 university students selected to attend the USDA's 2007 Agricultural Outlook Forum on March 1 and 2 in Arlington VA. Esguerra and Walker were thus participating in a new Student Diversity Program created by the forum.

"The forum has a tradition since 1923 of looking towards agriculture's future, and this year, we've created a new opportunity for students to learn about their own futures in agriculture," said Secretary Johanns. "Attending the Forum gives our young people the perspective to recognize historic change and the wide range of opportunities in today's world of agriculture."

This year's forum was entitled, "Agriculture at the Crossroads: Energy, Farm, and Rural Policy." (See essay excerpts and related article on this page.)

UMES USDA Liaison Officer leads trip to Ag Outlook Forum

When Ahmad Jilani encouraged students at UMES to submit an essay and application for a trip to USDA's annual Ag Outlook Forum near Washington DC, he did not realize what lay ahead. After two UMES students were accepted, Dr. Jilani was asked, as UMES's USDA Liaison Officer, to make arrangements and lead not just those two but the whole group selected for the Student Diversity Program. Other universities represented at the forum were Virginia State, Alcorn State, Michigan State, North Carolina A & T State, and Lincoln universities. The students' attendance was sponsored by corporations and USDA agencies including CHS Foundation; Deere & Company; Farm Credit Bank of Texas; AgFirst Farm Credit; Georgia Farm Credit Association; Cooperative State Research, Education, and Extension Service; Economic Research Service; and the Grain Inspection, Packers and Stockyards Administration. (See related article on this page.)

Essay excerpts

Kristen Walker included this comment in her essay:

"From caring for sick and neglected companion animals, to testing herds for bovine spongiform encephalopathy, to maintaining facilities for rare and exotic varieties of apes, my professional interests have always been firmly rooted around animals."

In her essay, Meredith Esguerra observed,

"Most of the greatest thinkers simply did their best at something they loved, for its own sake. They were able to pull free from the comforts of an apathetic society and focus on the problems that were in front of them."

Esguerra's essay was subsequently chosen best overall of the attending students' submissions.

New Money for Scholarships!

In the past year:
- Delmarva Mission Fellowship pledged $1,000/year ($500 per semester award) to an agriculture student
- Maryland Greenhouse Growers Association pledged a $1,000 scholarship annually to a student of horticulture.

These monies are in addition to existing scholarship funds from other donors that the department has available, which it awards to qualified students each semester.

Check out our website for scholarships, exciting programs, and activities in the department: www.umes.edu/ag
**Dahlia Jackson**
Dahlia Jackson ('05, Ph.D. Food Science) accepted a position as the Small Ruminant Specialist at Delaware State University beginning February, 2007. Dr. Jackson has research, teaching and extension responsibilities and plans to continue her work in sustainable production/management and small ruminant parasitology (with a molecular biology emphasis as well).

**Mark Gooden**
Another UMES graduate student, Mark Gooden ('96, M.S., FASC-Poultry Science) returned to UMES to begin his doctoral studies in the Food Science and Technology Program. As a former teacher in an agricultural college in Jamaica, Mark brings teaching experience to his graduate program along with his research and production (sheep/goats) experience. Mark would like to conduct research on the impact of possible alternative (natural) parasite control methods in goats and sheep on meat quality (including taste). Garlic and ginger are among the possible products to be tested. Keep a look out for opportunities to taste-test some lamb and goat meat in the future!

**Roger Estep**
Roger Estep ('51, Ag), became a leader in the field of veterinary science, then turned to university advancement, where he also made his mark. Estep earned his D.V.M. from Tuskegee Institute in 1962, taught briefly at Penn State College before joining Howard University first as executive assistant to the vice president for health affairs, then executive assistant to the president (while also heading a research program for the National Institute for Health in veterinary health), later Vice President for Development and Vice President for University Relations. Now retired, Dr. Estep is a member of the UMES President’s Giving Club and recently endowed a scholarship within the Department of Agriculture for $25,000 and is a member of the UMES Capital Campaign advisory council. Says UMES Vice President for Institutional Advancement Gains Hawkins, “Dr. Estep's commitment to his alma mater combined with his political connections in Annapolis and Washington DC and his government relations experience at Howard position UMES very effectively in the statewide and national political arena.”

**Alumni Update:** Dear alum, you can help us keep your information current and stay informed about your personal and professional accomplishments by completing and returning this form to Dr. Lurlene Marsh, Department of Agriculture, 1107 Trigg Hall, UMES, Princess Anne, MD 21853. Fax 410-651-7931 or email: lemarsh@umes.edu.

Name____________________________________________Major_____________________________Graduation Year________
Address_________________________________________________________________________________________________
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Phone (H)_____________________________ (W)__________________________ Email:_______________________________
Professional News________________________________________________________________________________________
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Ronald Haymaker, Jr. (*90, Gen. Ag.), licensed ISA arborist and principal of Haymaker Enterprises, recently joined forces with Bartlett Tree Experts. This greatly expands Haymaker’s access to diagnostic and research capabilities through the use of Bartlett’s Research Laboratory in Charlotte NC. He was on campus in August to plant a tree on Bartlett’s behalf as part of their 100th anniversary celebration.

Haymaker said he chose UMES as the site “because we do tree work for the University and it’s my alma mater.” A bit later he came again to donate a tree in memory of UMES President William P. Hytche. It is planted in front of the Richard A. Henson Center. In addition to tending to trees throughout tri-county area, he serves as president and truck captain of the Princess Anne volunteer fire company, vice president of the Somerset County Fair Board, Secretary/Treasurer of the Somerset County Young Farmers, Treasurer of the Somerset County Extension Advisory, and is active in Somerset County 4-H.

The first Ag Alumni Recognition and Scholarship Brunch was held during Homecoming in February, and it drew a remarkably large and friendly group. Alumni reminisced about their years at UMES. The group also discussed the need to recruit more students in the agricultural sciences and some of the challenges to recruiting quality students into the field. Other subjects were alumni giving and scholarship monies.

The department has plans to make this brunch an annual event. Make sure we know how to reach you! Use the form on the reverse of this page to keep us up-to-date.