We are continuing to break new records in outside funding for research and are always seeking creative partnerships to enhance our classroom and Extension outreach efforts. As our state dollars continue to decline, AGNR has embraced a re-structuring of our Extension delivery system by grouping counties and asking educators and clients to work across county lines to deliver programs. I count on your support and feedback as we move forward with this initiative.

I am very excited that 2012 is the 150th Anniversary of the Morrill Act establishing a public university in each state by “granting land” for such an institution. Being a land-grant university in 2012 is an overwhelming opportunity – yet an inspiring task to continue the legacy of integrating top-notch classroom instruction, good, sound and timely research with practical outreach to the communities that we serve.

I hope that you enjoy this issue of Momentum. I look forward to seeing you at Ag Day/Maryland Day on April 28th and in the meantime, please keep in touch as we always enjoy hearing from you.

Cheng-i Wei
Dean & Director

As you read through this issue, I hope that you appreciate that these few pages present just a glimpse of what our excellent faculty, staff, students and alumni are accomplishing in the variety of subject areas that touch human health and well-being through veterinary medicine. I am always fascinated by what is going on throughout the entirety of AGNR and hope that you will appreciate the strength to meet today’s challenges that comes from our diverse programs and opportunities. I am proud that our students are well prepared to enter the work force as our economy continues to rebound. Your scholarship support has helped them stay in school and your mentorship will help them succeed in their careers.
It may be one of the smallest departments on the University of Maryland campus, but the research inside the Department of Veterinary Medicine has huge ramifications internationally and is bringing in millions of dollars in research funding.

The key is the Biosafety Level 3 facility, a USDA-approved BSL-3Ag high contaminant facility, one of very few in the Baltimore-Washington corridor, in which research is conducted daily on highly-pathogenic animal and human diseases. That facility has unlocked doors to new research led by a core group of scientists who are experts in their field, all working here at the Department of Veterinary Medicine.

Siba Samal, Ph.D.

Dr. Samal’s research is focused on helping people. That is the reason he heads to the lab to find a new vaccine or a better treatment to help save lives.

It’s a lofty goal, but one he works on daily.

“The research must reach the people. That is my biggest contribution to the society. That is the ultimate goal of my research,” he said.

Dr. Samal is perhaps the leading expert on Newcastle disease virus, one of the costliest animal diseases in the world. The disease is one of the most infectious poultry diseases, affecting all species of birds.

Dr. Samal is trying to fine-tune a vaccine that already exists but doesn’t offer complete protection because the virus is slightly different depending on the region of the world where it is spreading. He is working on the development of vaccines for Mexico, Indonesia, Malaysia, Thailand and India.

“We make the vaccine strain and they reproduce it,” Dr. Samal said.

Within the last few years, Dr. Samal has genetically engineered the Newcastle disease virus as a vector vaccine for human and animal diseases. This approach may have a broad application for other vaccine developments against human and animal diseases for which vaccines are currently not available.

The National Institutes of Health (NIH) has awarded Dr. Samal a $4.1 million contract to continue along this research tract working to develop vaccines against SARS, avian influenza and HIV. The USDA awarded him a national competitive grant to develop a vectored vaccine for infectious laryngotracheitis disease in chickens. The annual research expenditure of his laboratory is around $1 million.
Dr. Pal is working on a way to both eradicate the disease and develop a better way to make an earlier diagnosis. He's got a $1.5 million grant from NIH to do it. Dr. Pal has identified some of the important components necessary for the bacteria Borrelia burgdorferi to thrive in the host and the vector (the tick). The team is working on creating a vaccine to block that protein required for cell division of the bacteria. While an animal Lyme vaccine is available, the complimentary one for humans was pulled from the market because of patient complications and cost. Dr. Pal has created a new diagnostic tool to complement the existing Lyme disease blood test. The current testing method often results in false negatives because the growth of the bacteria is often too slow to detect initially. Symptoms of Lyme disease are also similar to other diseases making the correct diagnosis difficult. "The bite to symptoms can take months while the bacteria are hiding in the spinal fluids and joints, places that are tough to treat," Dr. Pal said. He won the 2009 Outstanding Invention of the Year from the University of Maryland Office of Technology Commercialization for the testing. Dr. Pal's research was recently highlighted in the Journal of Infectious Diseases.

Dr. Perez's research interests include the interspecies transmission, pathogenesis and evolution of avian influenza viruses and the role of cross-protective immunity in the spread to other birds and mammals. Among Dr. Perez's major scientific contributions has been the participation in the development of the first plasmid-based reverse genetics system for influenza, which allows the complete manipulation of the influenza genome. Such strategy has proven instrumental in the preparation of vaccines for pandemic preparedness. Dr. Perez is currently heading a major research project collaborating with 17 other institutions across the U.S. and funded by the USDA. This $11.5 million project entitled "Prevention and Control of Avian Influenza in the U.S." is the largest granted by the USDA to combat a single disease. The research is also part of the Center for Research on Influenza Pathogenesis funded by NIAID-NIH. With an annual research expenditure of almost $3 million, the Perez lab has developed an experimental avian influenza vaccine. Dr. Perez is the recipient of several awards including the 2010 Faculty Research Award presented by the College of Agriculture and Natural Resources of the University of Maryland, the 2005 Bayer-Snoeyenbos Young Investigator presented by the American Association of Avian Pathologists and the 2008 Pfizer Award Research Excellence.

More Researchers Leading the Way

Dr. Georgiy Belov, Ph.D. has been at the department for about one year and he is making strides in his research on stopping viruses at the cellular level. His research is aimed at understanding the basic immunology and the prevention of diseases like HIV, and herpes through mucosal immunology. Mucous membranes are linings on our body surfaces of the nostrils, mouth, intestines and genital area. A complicated system, Dr. Zhu and his research team are working to understand how the body's mucosal surfaces work and how to develop vaccines to block the pathogens from entering the body through mucosal surfaces. While most vaccinations occur via a needle through the skin or into the muscle, vaccine delivery via the mucosal surfaces could be more effective in creating a stronger immune response.

He has established a research program focusing on molecular immunology and mucosal infections and inflammation in a variety of animal models. This year he has had his work on the studies of antibody and FcRn function in mucosal infections and vaccine development published in the Nature Biotechnology and the Proceedings of the National Academy of Sciences.

His work has filed patents and caused the industry interest and has already received $2 million in grant funding from NIH since 2006. "Students are coming here because they are seeing the work that we do," Dr. Zhu said. "The U.S. is the leading country in the world for research like this. Other countries are trying to catch up. We don't want to back off now."
“Viruses are most vulnerable at the beginning of infection when the cell is attacked by only a few viral particles. We are working to understand the initial stages of viral replication cycle to be able to prevent the spread of infection,” Dr. Belov said. “This is another way to go about treating viruses that are difficult or impossible to control with vaccines because of their high diversity and mutation rate”.

**Dr. Yanjin Zhang, Ph.D.** is working on molecular virology and viral pathogenesis of porcine reproductive and respiratory virus (PRRSV) and hepatitis E virus (HEV) to generate a new vaccine and novel therapeutics.

PRRSV has caused the most economic losses to the swine industry worldwide. Working through grants from the USDA and National Pork Board, Dr. Zhang and his team are researching a new approach to improve protective immunity.

HEV is the causative agent of acute human hepatitis in many parts of the world. It is a zoonotic infectious agent that has been identified in swine, rat, rabbit, chicken and deer. No vaccine of therapeutics against HEV is available. Working through a NIH grant, Dr. Zhang and his team are conducting research on a new antiviral drug and virus-cell interactions to combat the disease and block viral replication.

**Dr. Daniel Nelson, Ph.D** is getting research funding from the U.S. Department of Defense in an effort to find ways to help soldiers recover from injuries more quickly.

Dr. Nelson studies bacteriophage, viruses that only infect bacteria. He and his team are looking to piggyback on the lessons learned by studying this battle to replicate these bacteriophage proteins to use as therapeutics against human pathogens.

Because soldiers who undergo extensive surgeries often require extended hospital stays and rehabilitation, they have an increased opportunity for infections. This research could help in eliminating bacteria and thus infections.

While some of his work has already been in commercial development, other new projects such as a depolymerase enzyme to treat a biofilm, a sort of “slime” shield to render bacteria more susceptible to common antibiotics, is still in its beginning stages.

**Dr. Ioannis Bossis, Ph.D.** is working to enhance or induce our immune system to fight certain infectious diseases and cancer.

Dr. Bossis is developing a safe and practical vaccine platform capable of priming the cytotoxic T lymphocytes to recognize the abnormal fingerprints and eliminate damaged cells. He also studies the mechanism of autophagy and autophagosome function. Autophagosomes are intracellular organelles responsible for “housekeeping” duties that include recycling damaged components, elimination of foreign invaders and display of abnormal fingerprints to our immune system.

Dr. Bossis is also committed in helping promising young students to learn how to do research early on. He is mentoring and helping an undergraduate team of Gemstone honor students to perform a novel research project on gene therapy.
He estimated that more than 50 percent of the faculty within the veterinary science department “have lived abroad and continue to have ties” in those countries. As for the students, “our intent is to have every student have the opportunity for an international experience.”

One such opportunity is a partnership with Edward Via College of Osteopathic Medicine in Virginia to send students to the Dominican Republic and Honduras. The partnership means that Maryland can piggyback on an already established program, complete with existing student housing so that “we can bring down costs dramatically for students,” the professor said.

Expected to last over three years, the program will have students looking at the diseases in those two countries that are directly passed from animals to humans.

“By improving animal health, you’re improving human health,” Dr. Vroegindewey said.

The first group of students will begin by assessing the types of animals, the diseases and available resources, and will be shadowing medical students to see what illnesses show up at the health clinics. Later will come a needs assessment and the development of a plan with local livestock producers, veterinarians and residents weighing in. “We’ll look at how we can bridge the gap,” Dr. Vroegindewey said.

In addition to working with Edward Via College, “we are developing a process to collaborate with other U.S. veterinary colleges to share best practices in training students, and establishing outcome metrics for students,” he said, adding that they are “exploring two programs for sustainable agriculture in Africa and a program for disease surveillance in Armenia.”

Through his academic career and also as part of his U.S. military service, the retired Army colonel is well-traveled, having made 16 overseas visits just with the military alone, from China to Panama, New Zealand to Tunisia.

Although he is bullish on the importance of travel, he also values the global process to collaborate with other U.S., regional College of Veterinary Medicine (VMRCVM). It’s where private practice clinical animal health medicine and public/corporate veterinary medicine come together, each with its own strength. Together as one, this regional collaboration focuses on students’ interests and makes veterinary medicine affordable to the two states’ residents.

The concept is simple. Thirty resident students from Maryland, 50 from Virginia and up to 40 out-of-state residents are selected annually to attend the regional college, with a teaching hospital in Blacksburg, VA, at Virginia Tech, a campus College Park, MD, at UMCP and an equine medicine center in Leesburg, VA.

Maryland and Virginia have innovative partnership in veterinary medicine

By Becky Brashear

It’s unique. It’s novel. It’s successful. It’s the only concept of its kind in the U.S. - the Virginia-Maryland Regional College of Veterinary Medicine (VMRCVM). It’s where private practice clinical animal health medicine and public/corporate veterinary medicine come together, each with its own strength. Together as one, this regional collaboration focuses on students’ interests and makes veterinary medicine affordable to the two states’ residents.

The concept is simple. Thirty resident students from Maryland, 50 from Virginia and up to 40 out-of-state residents are selected annually to attend the regional college, with a teaching hospital in Blacksburg, VA, at Virginia Tech, a campus College Park, MD, at UMCP and an equine medicine center in Leesburg, VA.

There was a time, however, when Maryland didn’t want a veterinary school, and Virginia was moving ahead with its plans, according to Dr. John Brooks, long-time veterinarian in Harford County, who has helped lead some charges in veterinary medicine on Maryland’s behalf. Dr. Brooks and a team of supporters during the Gov. Schaeffer Administration got two Maryland senators to sign on to this concept with the 50/50 share of student financial support. In most cases that would be the end of the story. Not so for this regional program.

“The program ran into a downward turn and the state’s (Maryland’s) funds were frozen for Maryland’s 30 students,” Dr. Brooks explained. Virginia subsidized Maryland students for a period of time.

To become accountable, Dr. Brooks, former Maryland Deputy Secretary of Agriculture and Chairman of the American Veterinarian Medical Association, concluded that “the only thing that would work would be to put a surcharge on Maryland students – it had to be done because Maryland was not paying its fair share.”

But a phone call to then-Maryland Senator Bill Amoss apprising him of the situation changed all of that.

“On his death bed, Senator Amoss of Harford County dictated to his wife a bill that would guarantee Maryland would pony up to its agreement with the vet school,” Dr. Brooks said. “It was presented in Annapolis and passed the senate unanimously. It’s the only perpetuity bill to have done so, with...
Valerie Ragan, DVM, Director, CPCVM.

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MOMENTUM 11

By Nancy Luse

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offer externship opportunities and hire

many of the CPCVM’s graduates,” said

Valerie Ragan, DVM, Director, CPCVM.

“We spent a lot of time together on

Interstate 81 back and forth to Blacks-

burg meeting with then-Dean Peter

Eyre,” he added. Later, an on-site visit
to the Blacksburg campus was set up for

legislators to see what the school looked
like and how it functioned.

Once the visit was made to the

Blackburg campus, officials like then-
Delegate James E. McCellan asked why

there was even any opposition to the

non-support of Maryland’s funding.

“There were a series of players in all
the efforts ... people in the right places
at the right time ... and it was thumbs
back to the roots in Maryland agricul-
ture,” Dr. Brooks continued.

The College Park campus, like the

Blackburg campus, offers its own

strength to the joint college. UMCP

houses the Center for Public and Cor-

porate Veterinary Medicine (CPCVM),

the only center of its kind in the U.S.
The center trains veterinary students for

a broad range of public veterinary

practice careers from zoo and wildlife

medicine, prevention and control of

emergency and infectious diseases,
to public health and food safety. The

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offer externship opportunities and hire

many of the CPCVM’s graduates,” said

Valerie Ragan, DVM, Director, CPCVM.

“Our team in College Park interacts

with these agencies on a near daily

basis. “The Maryland campus of this

combined program also assists Mary-

land students who want to go to vet-
erinary school,” Dr. Ragan added. “Our

center spends a lot of time advising

Maryland pre-veterinary students on

how to become competitive applicants.

In addition, for the past two years, the

CPCVM has coordinated a field trip for

Maryland pre-veterinary students to

the Blacksburg campus of VMRCVM

where they were provided with an

admissions seminar, the opportunity to

sit in on a veterinary school class and

were given a tour of the college and its

teaching hospital.”

Dr. Ragan said her team also

spends a lot of time conducting career

transition counseling with gradu-

ate veterinarians who want to leave

private practice and transition into a

career in public or corporate veteri-
nary medicine, working with state or

government or private industry. The

CPCVM in College Park also over-

sees the public and corporate track,
one of five tracks taught within the

veterinary college. The other tracks are

small animal, large animal, equine and

mixed animal practice.
The CPCVM and Department of

Veterinary Medicine, which conducts

significant veterinary research, are

located in the Avrum Gudeisky Vet-

erinary Center at the University of

Maryland in College Park.

“The college is poised to take on

national prominence, particularly as

you look to food safety, terrorism and

animal health and to educate students

and serve the public through this cen-
ter,” Dr. Streett said.

“Many now recognize that this

center needs to be supported,” Dr.

Brooks said. “Per capita the veteri-
nary researchers at this center gain

more Muriel grants, $3-$5 million per

person, than anyone else on the College

Park campus. These folks are unsung

heroes and we need to blow our horn

more.

“Now it’s important to raise the

banner of opportunity with the Gu-

desky Center,” he said. “Students are

coming to this center because of the

teaching in animal health.”

Dr. Ragan said while most veteri-
nary colleges are seeing a decrease in

application numbers, applications for

VMRCVM actually increased in 2011.

“Our center we’re not trying to

do it like most veterinary colleges,”

Dr. Brooks added. “Rather, the focus is

on playing off the strengths of a battery

of professors, so we’re not duplicating

our efforts through all of this and what

we offer.

“The market place for veterinar-
iens will diminish or change and there

will be a demand for the type of stu-
dents that we are turning out,” he ex-

plained. “We have the opportunity here
to affect the changes we see coming, or

we can be affected by the change if we

stand on the sidelines. We’ve got to be

positive and forward thinking.”

It’s been that vision that Drs.

Brooks, Streett and Eyre all have in

common. “Peter (Eyre) is the one who’s

the vet academic visionary. His

vision is the way to make all of this work,

while focusing on dimin-
ishing the costs of vet schooling,” Brooks

added. The Maryland and Virginia model

has cut the cost for a vet student by some

50 percent.

Extending a helping hand

Poultry specialist works with backyard
tock owners

By Nancy Luse

Dr. Nathaniel Tablante

rue, the turtle is the big

force on University of Mary-

land College Park campus, but

in Dr. Nathaniel Tablante’s
corner of the university, it’s

poultry that rules.

Dr. Tablante, associate pro-

fessor and Extension

poultry veterinarian, has been

at the university since 1997

and is one of just a handful

of veterinarians in the coun-

try specializing in poultry. He

was initially assigned to work

in Salisbury “because that’s

where the chickens are,” but

more recently it was decided,

“I would be better on the

main campus.” His duties are

divided between teaching,

research and the Extension

service work, with the latter
taking up about 75 percent of

his time.
“I was originally hired to work with the commercial poultry industry,” he said, but lately there’s been a shift to helping backyard operations as more people embrace the notion of eating what they produce, and more municipalities are adopting regulations that allow residents to have a few chickens out back, mainly for egg production.

“Every county or city is different and it seems more officials are not frowning on the idea,” he said, although “noisy roosters aren’t allowed and you have to have proper housing,” which means apartment dwellers are obviously out of luck.

That’s Dr. Tablante’s dilemma – as much as he’d like to raise a flock of his own, “I live in a townhouse in an Elkridge neighborhood where there are lots of dogs, but no fowl.” Still, he supports the industry by eating chicken several times a week. “It’s my favorite food,” he said.

As part of his work, the veterinarian works with other University of Maryland Extension poultry specialists in educating people to help keep Maryland’s flocks healthy.

“Commercial poultry operations are easier to deal with because they are under contract with poultry companies and receive adequate technical support. However, backyard poultry operations are independently owned and so diverse in terms of size, poultry species raised, level of technical know-how and location. Backyard flock owners have to register with the Maryland Department of Agriculture because they want to know where all the chickens are in case there’s a disease outbreak,” he said.

Bird flu (Highly Pathogenic Avian Influenza H5N1) from several years ago made headlines as it devastated flocks mainly in Asia, but it “never got to our shores,” Dr. Tablante said. Nonetheless, continual diligence is necessary to avoid epidemics. Part of that mission is getting people to use simple common sense – like practicing good biosecurity and observing proper hygiene and sanitation such as washing their hands and wearing dedicated footwear and clothing when working with poultry. “An ounce of prevention is worth a pound of cure,” he said. Research efforts are also key to maintaining healthy birds. One of his students, for example, is working on developing a better vaccine against a viral respiratory disease which “is still hurting commercial poultry operations.”

It’s apparent that Dr. Tablante especially enjoys his interaction with the backyard poultry farmers.

Some call him on a regular basis, including one woman who asked if it would be OK to give a sick chicken an aspirin. He often worries about the novices, especially ones who are raising chickens based only on what they glean from the Internet. “The first things that pop up on Google are not always factual or scientific,” he said. “Our goal is to get out good information.”

Dr. Tablante is also involved in the Council for Agricultural, Science and Technology, a national group of animal, environmental, food and crop scientists that publish papers on the latest research to lawmakers and the general public. He became president of the group in October.

For a veterinarian who started out in cattle and never anticipated a deviation into poultry, it has been an interesting and fulfilling career, he said.
prevent diseases of animals entering and leaving the state of Maryland, and manage any disease or animal health issues in the state. On a Federal level, public practice veterinarians may work on public health policies, research or diagnostics to prevent the outbreak of animal diseases within the country and prepare for what would happen if an outbreak occurred. Some diseases can be transmitted animal to animal, such as foot-and-mouth disease, or animal to human, such as the bird flu or swine flu. An outbreak of one of those diseases could have huge impacts on our country’s economy and well-being.

Public practice veterinarians work at the national level to ensure the health of our nation’s animal populations and the safety of our food. After all, safe food begins with healthy animals. At the Center for Public and Corporate Veterinary Medicine, one of the things we do is prepare veterinarians to prevent and respond to accidental or intentional introductions of these kinds of diseases.

With training like this, the location of the CPCVM could not be better. Its proximity to Washington, D.C. gives the students and graduates ample opportunities for field experience. Many of the fourth-year students are placed in agencies around the area. The CPCVM has gotten students positions at organizations like the National Institutes of Health, the U.S. Department of Agriculture, the Food and Drug Administration and the U.S. Customs and Border Protection Agency. There have even been international opportunities in India, China, Chile, Armenia and other countries.

Even in a shaky economy, opportunities for public veterinarians are present. As Cassie Wedd, a veterinary student in the VMRCVM points out, “The need for public vets is there. There will always be animal diseases to treat, so there is job security in the field. I’m really interested in public health policy. Unlike most of my fellow vet students, when I graduate, I may be one of the few vets not working directly with animals.” Cassie is a former nurse who decided to combine her passion for human health with her passion for animals and found public veterinary medicine could give her the right combination of the two. “I can work with animals, but I can also make a difference in human lives on a grand scale, and that makes me feel good.” In addition to students new to the medical field, many of the public and corporate veterinary medicine students are private veterinarians transferring into the public or corporate sector, or, like Cassie, transferring from other professions altogether.

What seems to set this center apart from other veterinary centers is the tremendous impact the vets coming out of the center can have on animal and human health, and the enthusiasm its students have. “Students entering the center grasp (the high stakes) and it’s exciting,” says Dr. Ragan. “It will be interesting to see what it can lead to. This is definitely a unique center with passionate students. Although, I am a bit biased, I love my work at the center.”

Passionate veterinarians like Dr. Ragan and the graduates from the Center for Public and Corporate Veterinary Medicine are one of the reasons we can enjoy safe foods and even our own health. Next time I am sitting down to a disease-free dinner safe in my home, I will remember I have a veterinarian to thank.

Just a few decades ago, most veterinary education programs were only clinical and only produced generalist veterinarians. In 1989, a publication of The Pew Report highlighted the need for a change. The report, titled “Future Directions for Veterinary Medicine” noted that changes in the environment and society presented the need for specific veterinary knowledge and skills, rather than vets treating all animals regardless of size or situation. The report also suggested veterinary medicine move from being purely clinical to include public veterinary needs. The VMRCVM took heed. Thus the Center for Public and Corporate Veterinary Medicine (CPCVM) was born. The CPCVM is collaboratively administered by both the University of Maryland and Virginia Tech and is the only center of its kind in the nation.

So if these veterinarians are not healing my sick cat like the veterinarians I am used to, what do they do? Dr. Valerie Ragan, the CPCVM Director, explained that public and corporate veterinarians can have incredible impacts on animal health, and human health as well.

“Take rabies for example. When there is an occurrence of rabies in Maryland, there is a veterinarian at the Maryland Public Health Department that deals with that. A public health veterinarian would investigate the outbreak and trace its sources and potential exposures. On a larger level, there are public practice veterinarians who

**LAND-GRANT: **

* Serving You *

**LAND-GRANT** universities are shaped by the people and the times. Through a threefold effort of academic instruction, research through the Agricultural Experiment Station, and outreach through Extension, the College of Agriculture and Natural Resources at the University of Maryland at College Park and its 1890 counterpart, the University of Maryland Eastern Shore, pursue the land-grant mission. The following Federal statutes are the foundations upon which the nation’s land-grant institutions were built:

1862 – The Morrill Land-Grant College Act created a college in each state to educate citizens in agriculture, home economics, mechanical arts, and other practical professions.

1887 – The Hatch Act linked land-grant colleges and USDA, providing research funds for state agricultural experiment stations.

1890 – The second Morrill Act expanded the system of land-grant colleges to include historically black institutions, known as 1890 institutions.

1914 – The Smith-Lever Act established the Cooperative Extension Service, a partnership between land-grant institutions, local governments, and USDA that provides practical, research-based information to the citizens of each state.

**Keep Us Growing…**

As you have seen in this issue of Momentum, the veterinary program at University of Maryland is strong, diverse and very accomplished. Recent gifts to the College will strengthen this program even further:

Fred and Peggy Anderson were lifelong Maryland residents before they retired and moved to South Carolina. They decided to establish a scholarship, the Quinten and Flora Harpine Graduate Award Endowment, in memory of Peggy’s parents because of their love and compassion for animals. This fund will support the excellent graduate students working in our Department of Veterinary Medicine.

Dr. Mitchell Essey was a senior staff veterinarian at USDA-APHIS and an acknowledged international expert in bovine tuberculosis epidemiology. Dr. Essey directed scores of veterinary practitioners in diagnostic methods which have resulted in improved national and international animal health standards, policies and procedures. In memory of Dr. Essey, his family established the Dr. Mitchell A. Essey Veterinary Public Practice Scholarship, which will be awarded to students in the Center for Public and Corporate Medicine.

Every year, the Virginia-Maryland Regional College of Veterinary Medicine (VMRCVM) accepts 30 Maryland residents into their rigorous DVM program. The steady stream of veterinarians produced by the vet school provides the state of Maryland with the veterinarians needed to care for our livestock and pets.

Judy Brocksmith (’64, Accounting) understands this critical need for excellent, qualified veterinarians. Since her retirement seven years ago, Judy has volunteered at her local shelter to socialize stray cats and assist with adoptions. Her strong commitment to her many feline friends and the care and professionalism exhibited by her veterinarians at the Herndon-Reston Animal Hospital led Judy to establish the Judith E. Brocksmit Veterinary Scholarship in her estate plan. This remarkable gift will provide for one full scholarship and one partial scholarship for students from the University of Maryland pre-vet program to attend the VMRCVM.

Even more remarkably, this commitment was not enough for Judy! She wanted to help students right away, so she recently established the Judith E. Brocksmit Pre-Veterinary Scholarship, an active-use scholarship that will be awarded annually to a student in our pre-vet program in the Department of Animal and Avian Science.

If you would like to support any of these terrific scholarships, please visit www.agnr.umd.edu and click on the “Giving to the College” link. These and many other scholarships are available for your support. Your gift will have an immediate and dramatic impact on the lucky student who receives it.

Thank you for your support of our College.

Brian W. Magness
Director of Development
bmagness@umd.edu
301-405-7733

By introducing farmers to alternative crops, the Small and Part-Time Farmers’ Program at the University of Maryland Eastern Shore helps increase productivity while reducing costs.

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1887 – The Hatch Act linked land-grant colleges and USDA, providing research funds for state agricultural experiment stations.

1890 – The second Morrill Act expanded the system of land-grant colleges to include historically black institutions, known as 1890 institutions.

1914 – The Smith-Lever Act established the Cooperative Extension Service, a partnership between land-grant institutions, local governments, and USDA that provides practical, research-based information to the citizens of each state.

The Rossborough Inn was the first Maryland Agricultural Experiment Station.

The College of Agriculture and Natural Resources’ programs are open to all citizens without regard to race, color, sex, disability, religion, age or national origin.
Dr. Peter Dernoeden, Ph.D., turfgrass science professor at the University of Maryland, will receive the 2012 Golf Course Superintendent’s Association of America (GCSAA) Col. John Morley Distinguished Service Award. The award recognizes the recipient as a leader in the industry and a leader in the advancement of the education and professional development of golf course superintendents. Dr. Dernoeden’s achievements include serving as a past president of GCSAA, and helping to create the University of Maryland’s Sustainable Agriculture Certificate program.

Hyman named IAA Director

Long-Time Institute of Applied Agriculture (IAA) instructor Glori Hyman has been appointed Director of the IAA. Hyman, who is a former University of Maryland professor, was a member of the faculty for 23 years. Prior to joining Maryland in 1993, she worked for 15 years as a turfgrass pathologist and biochemist with the U.S. Department of Agriculture.

Dcko-Named Distinguished University Professor

Dr. Marc Nerlove, center, receives the prestigious Distinguished University Professorship from President Wallace D. Loh, President, University of Maryland, left, and Dr. Ann G. Wylie, Senior Vice President and Provost, Maryland, right. Hyman named IAA instructor Glori Hyman. Nerlove turned his attention to expectation formation and business decisions. Using German and French survey data, he was able to show that rational-expectations models did not characterize these data. In conducting this research, he developed the application of econometric models to evaluate probability models in economics. More recently, his research has focused on agricultural development and on likelihood methods in econometrics. Dr. Nerlove’s many scholarly achievements have earned him numerous honors and awards, including, in 1969, the John Bates Clark Medal, given at that time biennially to the American economist under the age of forty who is judged to have made the most significant contribution to economic thought and knowledge. In 2010 he was asked to give the Centennial Address at the 100th Annual Meetings of the Agricultural and Applied Economics Association, a recognition of his preeminent status in the profession. He has also been a member of the National Academy of Sciences and a Fellow of the American Academy of Arts and Sciences. He is a Fellow and a past President of the Econometric Society, a Fellow of the American Statistical Association, a Fellow of the American Agricultural Economics Association (now the Agricultural and Applied Economics Association).

The title Distinguished University Professor is conferred by the President upon a limited number of members of the faculty of the University of Maryland at College Park in recognition of distinguished achievement in teaching, research or creative activities and service to the University, the profession and the community. Dr. Nerlove is the third AECF member to earn this rank, joining the late Bruce L. Gardner and current President Richard E. Jost, both named in 1995.

National Honor to be Presented to Dernoeden

Peter Dernoeden, Ph.D., turfgrass science professor at the University of Maryland, will receive the 2012 Golf Course Superintendents Association of America (GCSAA) Col. John Morley Distinguished Service Award. The award recognizes the recipient as a leader in the industry and a leader in the advancement of the education and professional development of golf course superintendents. Dr. Dernoeden’s achievements include serving as a past president of GCSAA, and helping to create the University of Maryland’s Sustainable Agriculture Certificate program.

Teaching Faculty (MTA). Under her leadership, the IAA expanded their presence with additional online classes, cooperative agreements with community colleges and the newly created Sustainable Agriculture Certificate program, which is one of the first in the country.

In 2011, Hyman managed a $25,000 grant from the Maryland State Department of Education to host the Curriculum for Agricultural Science and Education (CASE) Institute for secondary education teachers. Twenty-three teachers from across the U.S. completed the two-week program in July. The CASE Institute is scheduled to be offered at University of Maryland in 2012 and 2013, as a part of this initial grant.

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sports program, certifying 188 instructors who taught more than 800 youth. Thanks to individuals like Arnold, youth program enrollment is expected to increase across the country. "Conrad has been a huge asset to 4-H these last few years," said Federal Premium Conservation Manager Ryan Bronson. "His involvement, dedication and leadership has helped further 4-H’s mission and introduced countless more youth to hunting and shooting with the 4-H Shooting Sports Program. He has led by example and we're proud to honor Bill Stevens’ values and legacy by presenting Conrad with this award."

His major programs include milker schools, management intensive grazing and farm financial management. His international work took him to Moldova, Uzbekistan, Estonia and Georgia.

He is former president of the Maryland Association of County Agricultural Agents and count­y director and a columnist for The Frederick News Post. He has received 15 national awards, written or co-written 37 publications and was the principal investigator and co-principal investigator on more than $2 million in grants and solicited funds.

WALLS LEADS MARYLAND TEAM TO NAII
Institute of Applied Agriculture (IAA) instructor Roy S. Walls, Jr., was one of five Maryland educators to attend the National Agriscience Integration Institute (NAII), held at the Pioneer Hi-Bred headquarters in Johnston, Iowa. Others attending from Maryland were David A. Miller and Leasa Gueddara, both of the Maryland Agriculture Education Foundation, Inc., Sarah Shiner of Middletown High School and Diane Ogg of the Frederick Career and Technology Center.

Walls represented Maryland as a university teacher educator as AGNR’s relationship with the College of Education to certify agricultural science teachers continues to grow. NAII is an annual program that trains educators to implement inquiry-based science instruction in their agriculture and environmental science curriculums. The goal of the institute is to design hands-on, classroom experiences that prepare high school students for standardized tests and inspire enthusiasm for science education.

The Maryland team developed a state plan for incorporating inquiry-based education that will be supported by the MAEE, Maryland State Department of Education and the University of Maryland. Walls believes that agriscience education is critical for preparing the next generation to support the burgeoning global population. "We must educate young people with excellent science based skill-sets so they are ready to tackle the challenges of how to produce enough fiber, food and fuel for everyone," said Walls. 

"All of this will have to happen with less land resources and greater environmental pressures on agricultural production and public resistance to genetically enhanced plants and animals."

YEISER NAMED FACULTY ADVISOR OF THE YEAR
Gail Yeiser, AGNR assistant to the dean for alumni and external relations, was named Faculty Advisor of the Year at the spring awards program for the Department of Fraternity and Sorority Life. She serves as faculty/staff advisor for the professional social agriculture fraternity, Alpha Gamma Rho. She was a "little sister" when an undergraduate in the 1970s and her father, the late Paul R. Poffenberger '35 and '37, served as alumni treasurer for the fraternity until his death in 1996.

MARYLAND SOIL JUDGING TEAM WINS
The University of Maryland Soil Judging Team took first place with an impressive showing in the Northeast Regional Soil Competition hosted by the University of Rhode Island. AGNR entered two teams among a field of 12 from five universities including Delaware Valley College, Pennsylvania State University, University of Rhode Island and Willimington College of Ohio.

While Maryland’s A Team finished first, the Maryland B Team finished in third place. Maryland had five students among the top ten individuals. Contestants examined soils at three sites formed in glacial till and ice-contact stratified drift and winners were Chris Palaridy, first; Daniella Miller, second; Deirdre Griffin, fourth; Tyler Wiltowski, sixth; and Mark Mattovich, ninth. The group portions of the contest featured soils formed in ice-contact stratified drift on an esker and a kame terrace. The practice and contest pits featured an interesting assortment of soils formed in glacial parent materials.

Maryland had five students among the top ten. Students participated in the Poster Session and presented the following research: Xinwu Wang, alum from the University of Maryland, College of Agriculture and Natural Resources; Peiwen Li, from ENST; assess best management practices for soils in Maryland; Tushar Pradhan, PSLA, from the University of Maryland, College of Agriculture and Natural Resources; Four 4-H youth were also featured in the poster session and presented their research:1. Dagny A. Caden, from Middletown High School; 2. Jennifer Finucane, from Broadneck High School; 3. Kiera Reynolds, from Avon High School and 4. Jordan White, from St. Mary’s High School.

Maryland Soil Judging Team members included Inceptisols, Spodosols and Entisols. Over the week of practice and competition students examined, described and interpreted the soil profiles and landscapes at 20 sites, which proved to be a wonderful educational experience.

The University of Maryland team, along with a team from University of Rhode Island and Penn State University, will represent the northeast region in the National Collegiate Soil Judging contest in April, hosted by West Virginia University in Morgantown.

Pictured with Gail is outgoing Noble Ruler (president) Jason Kramke ‘11 who was one of 20 graduating seniors across the Greek System to be inducted into Kappa Epsilon Society recognized for outstanding service and leadership to their local fraternity, Inter Fraternity Council and the University.

Fifth place poster: Palaniyandi S., Tomel E., Li Z., Conrad D., Zhu X. of Vet Medicine, CD23-mediated transcytosis of IgE and immune complexes across the polarized human respira­tory epithelial cells.

Five Maryland educators attended the NAII conference, including, 1 to r; David Miller, Maryland Agriculture Education Foundation, Sarah Shiner, Middletown High School, Diane Ogg, Frederick Career And Technology Center, and Roy Walls, University of Maryland. Not pictured but attending was Leasa Gueddara, Maryland Agriculture Education Foundation.

Fultz Captures Service Award
Twenty-six year UME Educator Stanley W. Fultz received the 2011 Distin­guished Service Award from the National Association of County Agricultural Agents during the association’s annual meeting held in Overland Park, Kansas. The award program encourages and recognizes excel­lence in the field of professional Extension for members with more than 10 years of service.

Fultz has spent 26 of 26 Extension service years in Frederick County where he has focused on farm profitability and improved quality of life for dairy producers.

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Dr. Requette, Costa, Lee, Pradham and Xiao judged the posters and all five received $100. Congratulations to faculty mentors and thanks to Carol Hill, Tom Porter, Frank Allingham, and Mike Dwyer for assistance with the contest.

AGC Student On Panel
AREC Ph.D. student Aaron Adalja was selected to attend the AGC Student panel at the Atlantic’s inaugural Feeding Future Generations event in October at the

Poster Contest at Open House
Congratulations to all of the graduate students that participated in the Poster Presentation at the AGC Open House. The quality of the research projects being conducted was impressive and the event allowed students to interact with visitors and share their work.

The top five posters were: first, Nicole Fiorellino from ENST, Assessing Best Management Practice Implementation and Pasteurella on Maryland Horse Farms; second, Robert Berkey and Dipi Bendi-
Newseum in Washington, D.C. The program featured a keynote speech by The Honor- able Don Gibson and a panel with leading corporate, government and non-profit stakeholders in conversation about the challenges of feeding our global population while decreasing the environmental footprint of agricultural and livestock food production.

AgDiscovery Opens Doors
Young agricultural enthusiasts from across the nation came together in July to learn about career opportunities and experience college life during AgDiscovery, a three-week educational program hosted by the University of Maryland.

AgDiscovery is sponsored by the USDA Animal and Plant Health Inspection Service and the College of Agriculture and Natural Resources. Students in the program live on campus and are enrolled in a 3-credit course, “AgDiscovery: An Educational Odyssey Exploring Food, Culture, and the Environment” (AGN100). The goal is to give students a more holistic perspective on careers and opportunities in agriculture. Sixteen students, ranging in age from high school freshmen to recent graduates, participated, hailing from states like California, Texas, North Carolina and Indiana. Four university students served as mentors, assisting with activities, projects and field trips and introducing participants to university life. IAA instructor Ken Logan served as an AGN100 instructor and was instrumental in coordinating presentations and field trips.

Participants studied agricultural history, culture and current issues. Topics included plant and animal science, entomology, food science and landscape architecture. Students also engaged in hands-on activities and visited research and government facilities on field trips. Field trip destinations included the USDA, the National Zoo, Capitol Hill and the DuPont Research Laboratory in Dover, Del.

El Huggins, a junior high school student from Fort Washington, MD, was introduced to opportunities in plant science through a trip to Brookside Gardens. “My favorite field trip was going to the Brookside Gardens because I was able to find out about the career of horticulture, and that was one thing I’d really like to do, and it sounds pretty cool.”

AgDiscovery participants recommend the program to any student who is interested in learning more about agriculture beyond the classroom. “You think that you know something, but then you’ll come here and find out that it’s totally different,” said Huggins. “It’s knowledge that you need to know and knowledge that you’ll use even if you don’t become an agricultural major.”

I_AA_Student_at_Great_Kids_Farm
When a budding botanist encounters her first garden bug, should she squeal with delight or fear? That’s the question Great Kids Farm hopes to answer with its new insect collection, developed with the help of students and faculty from the Institute of Applied Agriculture.

The insect collection is a year-round exhibit for students visiting Great Kids Farm, an agricultural educational center owned and operated by Baltimore City Schools. Examples of native insects that are beneficial to Maryland crops will be juxtaposed against invasive species and garden pests that are disruptive to local ecosystems. The exhibit will serve as a cheat sheet for young gardeners when they identify creepy-crawly specimens in their backyards.

“We have a strong push for kids to develop gardens,” said Bethany Mathie, farm educator for Great Kids Farm. “But we want them to identify insects and know what’s there.”

Great Kids Farm decided to create an insect collection in June 2011 and Mathie recruited the IAA to get the project started. Under the leadership of Dr. Kevin Lakowicz-Dramby, a sustainable agriculture student, is working on the collection.

Great Kids Farm is always looking to make the curriculum interesting for kids. “What’s better than a real specimen?” said Lakowicz-Dramby. As a contributor, Lakowicz-Dramby collects insects, dead or alive, on campus or near her home. If she finds a living specimen, she captures the insect in a “kill jar” lined with ethyl acetate, which causes the insect to die without damaging its exterior. Dr. Mathias, who teaches IAG 231: Insects of Ornamentals and Turfgrass, showed Lakowicz-Dramby how to pin a specimen for display.

“So far, the collection consists of ground binder beetles that are often mistaken for roaches.”

IAA Student at Great Kids Farm Opened!

Congratulations to AGNR students who participated in the collegiate dairy judging contests held in Harrisburg, PA, and Madison, WI. From left, are, Hanum Wensl-Strow, Mac Campbell and Brittany Mills. At World Dairy Expo, 21 teams participated. Maryland placed 16th in Shrines, 10th in Guernseys, 15th in Holsteins and Jerseys and 19th in Red and White Holsteins. The team finished 18th in oral reasons and earned several positive comments from contest officials who realized they were newcomers to the dairy industry that honed their dairy cattle evaluation skills over the spring. The AGNR Alumni Chapter provided a grant to help defray expenses for the team.

Crop Science Scholarship Awards
Deirdre Griffin, a senior environmental science and policy student with a concentration in environment and agriculture and a minor in soil science, received the Society of American Foresters and O. Mott Scholarship. The honor is presented to a meritorious student who has com- pleted at least one year of graduate work leading to an M.S. or Ph.D. degree in a field of emphasis within crop science and who has outstanding potential for leadership.

Griffin’s studies focus on nutrient cycling in various cropping systems. She is a member of UMD’s Soil Judging team and plans to attend graduate school, studying soil fertility as related to soil microbiology.

The Institute of Applied Agriculture (IAA) hosted 23 secondary education teachers at the University of Maryland, College Park in July to learn how to teach the "Introduction to Agriculture, Food and Natural Resources (AFNR)" curriculum, designed to introduce students to a variety of agricultural careers, sciences and cultural issues.

The Curriculum for Agricultural Science and Education (CASE) enhances the use of science-inquiry and student-led classroom experiences to encourage a lifelong connection to agricultural knowledge and skills. AFNR is a ninth-grade applied agriculture class that serves as the foundation for pathway courses in plant science, animal science, environmental science and environmental science. By 2018, CASE plans to complete the writing and initial implementation of a four-year agriculture curriculum.

Maryland was one of 11 initial funding states for the development of the CASE curriculum. The Maryland Department of Education identified the CASE Institute as the standard agricultural education for all secondary schools and provided grant funding. In order to implement CASE courses statewide, educators must be certified to teach courses by attending CASE Institutes or workshops.

Under the leadership of IAA Director Giori Hyman and IAA Instructor Roy Walls, the College of Agriculture and Natural Resources hosted a CASE Institute for the Maryland.

Carol Allen, a plant science graduate student who helped coordinate the Institute, believes the University of Maryland is the ideal campus for the AFNR workshop. The variety of agricultural resources on campus supports the diversity of the AFNR curriculum. The soil samples used in the lab assignment were collected near the Comcast Center and the assignment was completed in the potting room of the Re- search Greenhouse Complex. Facilities like the Teaching Building, the Rodale Institute’s lab and local natural resources like Paint Branch stream supplemented the lessons.

“This is wonderful. The campus is gorgeous,” said Lisa Ann Moschera, a voca- tional school teacher from East Brunswick, N.J. “To have everything accessible – it’s an ideal setting.”

Over the course of two weeks, educators completed 165 days of units and lessons. IAA sent a survey to the educators from 8 a.m. to 5 p.m., learning classroom instruction and activities. In addition,
Students received homework assignments, which they completed at night in their hotel and even during lunch time. Some teachers found the coursework to be challenging, especially with the time constraints, “I try to get my homework done as soon as I can, otherwise it’s overwhelming,” said Dave Bowman, a vocational agriculture and science teacher from Hampton, Iowa.

The AFNR workshop was led by Melanie Bloom of Sioux Rapids, IA, and Leslie Fairchild of Columbus, OH. Both certified CASE instructors and secondary education teachers themselves, Bloom and Fairchild directed each lesson and challenged the educators to evaluate their teaching.

“It takes teachers a while to adjust to a new style of teaching,” said Bloom. “So the two-week institute is almost like a boot camp because we’re really challenging teachers to get out of their comfort zones and try something different.”

CASE lead teacher Leslie Fairchild assists educators with a lab assignment.

The educators who participated in this CASE workshop are now certified to teach the AFNR curriculum in the fall.

For each lesson, educators completed all of the lab assignments and activities that their own students would do in the classroom. Although the AFNR curriculum covers topics essential to any introductory science course, like plant, animal and food science, educators agree that CASE reinvigorates this basic content. “I think it’s really going to enhance what we’re already doing,” added Marinos.

Bloom believes that the emphasis on student-led classroom experiences will leave a lasting imprint on a student’s appreciation for agriculture. “This is a really nice blend of leading students to ask questions about certain topics or to question ‘Why is that the way that it is?’” she said. “We present just enough information at just the right time so that students really have that ownership of the materials themselves and hopefully really use that pedagogy to bring those lessons home.”

With the support of a fully prepared curriculum and the experience of the AFNR workshop, educators believe CASE will reinvigorate their teaching as well. The CASE lead teachers ensure that the workshops themselves are student-led so that educators can visualize their classroom environment adjusted to the AFNR curriculum.

“I think it’s really important to put teachers into the students’ shoes so that they understand the thought process that their students will be going through when they’re being led through the curriculum as well,” Bloom said.

“We’re proud to have been selected as one of the nation’s host sites,” says Hyman. “The IAA and the college are committed to supporting education in the state. We want high school students to become active learners, and of course, we want them to continue their education at the University of Maryland.”

Last summer, the State of Maryland passed legislation establishing a new high school graduation requirement for environmental literacy. Bloom asserts that the CASE curriculum naturally incorporates this requirement. The AFNR course materials were released nationally last year, and newly certified teachers will be the first instructors to kick off the school year with the official curriculum.

COMMUNITY GARDEN DEDICATED

The University of Maryland Extension held its Sheridan Street Community Garden Dedication Ceremony and Open House last fall. Over 80 gardeners, community members, University students, faculty and staff attended. Guests enjoyed remarks by the University of Maryland President, Dr. Wallace Loh, Dean Wei from the College of Agriculture and Natural Resources, Delegate Anne Healey, District 3 Council Member Eric Olson and community gardeners.

The Sheridan Street Community Garden, operated by University of Maryland Extension, is located at the center for Educational Partnership in Riverdale. With 39 plots, the garden serves individuals, families and community groups such as the Maryland Multicultural Youth Center, Gap Buster Learning Center and William Wirt Middle School.

Gardeners use their plots to grow food, including tomatoes, okra, corn, peppers, squash, watermelon and more. People sign up for their plots each spring and pay a nominal fee to cover the cost of shared expenses. Trainings are offered several times per year and gardeners are provided with water, compost and tools. Monthly work days offer chances for gardeners to come together and maintain common areas. To donate or to get involved, contact Christie Balch at cbalch@umd.edu.

MARYLAND STATE FAIR

Mother Nature didn’t deter 4-Hers and AGNR enthusiasts from participating in the Maryland State Fair in Timonium. A few short days after Maryland’s first 5.9 earthquake in 114 years, officials in Timonium kept in constant touch with AccuWeather folks and Maryland’s emergency preparedness officials as the fair opened with Hurricane Irene moving her way up the east coast. When all was said and done, the fair closed early as a precaution one day and offered reduced rates to folks following the storm when thousands were without electricity. Exhibitors were offered options during the opening weekend to use the fair after usual dismissal times as “safe haven for themselves and their animals” or were allowed to leave early to safely secure things at home. When all was said and done, Irene didn’t do as much damage in Maryland as anticipated, but preparations in Timonium were managed with a gratifying spirit of cooperation and collaboration to ensure safety for animals, exhibitors and fairgoers.

For 4-Hers and AGNR exhibitors, the fair went on without too many serious interruptions. The annual 4-H Livestock Sale and other events usually held on the first weekend were rescheduled into Labor Day weekend.

AGNR dairy cattle helped open the fair for the fourth year and remained on site through the close on Labor Day. Student employees joined with AGNR faculty and staff that work with the dairy cattle daily at the Central Maryland Research and Education Center’s Clarksville Facility throughout the summer to select and prepare the animals to be on exhibit and enjoyed by the public for 11 days. Last year’s newborn calf named “CowRipkin” by exhibitors in 2010 was on exhibit as a yearling ready to be bred. The AGNR newborn calf naming opportunity drew thousands of suggestions during the opening weekend, with names related to the recent earthquake and impending storm being quite popular. The 2011 newborn calf was named Milkshake by the national public. Students were also visited with fairgoers about dairy related...
Even with the cool damp weather, AGNR hosted over 1,900 people at its annual Open House in October, showcasing the breadth of things that AGNR is involved in across the state with academics, research and Extension. For the first time, the event included 36 graduate students exhibiting posters and on-hand to explain their research and study areas. Exhibits and activities ranged from 4-H shooting and archery, food safety, college recruiter, nutrient management, native plants, green technology, what makes popcorn pop, dairy, poultry and equine, wagon tours of the facility, 4-H programs, AGNR student clubs and much more. The annual event was held at the Central Maryland Research and Education Center’s Clarksville Facility in Howard County.
Over 150 AGNR Alumni, faculty, students and friends gathered at the campus farm for the annual Homecoming Tailgate. This year’s tailgate featured pulled pork barbecue and all the fixin’s. Dr. Cheng-i Wei purchased the hog at the state 4-H livestock sale and donated it to the alumni chapter for the event. Jamie Garvick of Carroll County, the 4-H’er who raised the hog as his 4-H project, and his family were on hand to enjoy the tailgate as well as the football game against Clemson. AGNR Alumni Board member Peter Downey ’87 served as tailgate chair.

Training Lab Opens
AGNR’s Joint Institute for Food Safety and Nutrition (JIFSAN) dedicated the International Food Safety Training Laboratory (IFSTL) in September. From left, are, Steven M. Musser, Director, Office of Regulatory Sciences, FDA, Arthur G. Caputo, President, Waters Division, Waters Corporation, Dr. Wallace Loh, University of Maryland College Park President, Dr. Cheng-i Wei, Dean, AGNR and Dr. Jianghong Meng, JIFSAN Director. The IFSTL was created through a unique academic-public-private partnership among the University of Maryland, JIFSAN and Waters Corporation. JIFSAN is a 15-year-old partnership between the University and U.S. Food and Drug Administration (FDA) and the IFSTL will enable the Institute to broaden its impact on laboratory capacity building. IFSTL is the world’s first hands-on training laboratory dedicated to helping governments and manufacturers adapt technologies and food safety testing methods to ensure their exports meet increasingly stringent regulatory standards. The IFSTL has the capacity to train over 200 domestic and international government and industry scientists per year on regulations and best practices for food safety testing methods.
contributes to the national and international dairy community. Myers joined other Marylanders, such as Shank Stiles Fulton ’77, who were named Dairy Woman of the Year in 2001 and 2006, respectively.

Georgia’s Fort Valley State University President Larry E. Rivers named Dr. Govind Kannan ’95 as the new dean of the College of Agriculture, Family Sciences and Technology in August, 2011. Dr. Kannan earned his bachelor and master’s degrees in veterinary science from Tamil Nadu Agricultural University before receiving a doctorate in dairy science from the University of Maryland. The Indian American joined the FVSU faculty in 1997 and subsequently served as director of the Georgia Small Ruminant Research and Extension Center, interim assistant dean for research and interim dean of the college.

Charles Iager ’65 received the Distinguished Leadership Award from the National Holstein Association, USA, during its convention in June 2011. The award is given to “an individual who has provided outstanding and unselfish leadership and made a notable contribution to the Holstein Association and/or the dairy industry.” Charlie was recognized for his valuable contributions to organizations in his home state and nationally and his enthusiasm for the people in the dairy industry is constant-
ly renewed. Charlie and his wife, Judy, were also cited for their combined volunteer work on behalf of dairy organizations and friendly outgoing enthusiasm for peers and the next generation.

Dr. James Kessler ’75 & ’80 will serve as the poultry senior technical services manager at Kemin. Previously, he spent ten years as the executive director of the Poultry Science Association and has held key positions in the poultry industry for Alpharma Inc., SmithKline Beckman Corporation, Nutrisia, Inc. andRalston Pu-
rina Company. He holds a Ph.D. and Master of Science in nutrition/biochemistry from the University of Maryland and a Bachelor of Science in animal science from Ohio State University. Dr. Kessler is the author of an extensive list of publications in professional journals and the popular press.

Dr. Jack D. Fry ’84 M.S. received the Fred V. Grau turfgrass Science Award from the Crop Science Society of America during its annual meeting in San Antonio, TX. Fry is a professor in the Department of Horticulture, Forestry and Recreation Resources at Kansas State Uni-
versity. He received a B.S. degree from Kan-
sas State University, M.S. from the Univer-
sity of Maryland and Ph.D. from Colorado State University. Dr. Fry teaches courses in turfgrass culture and golf course and sports turf operations. His research is focused on responses of turfgrasses to environmental stresses and maintaining turf quality with reduced pesticide inputs.

Linda Saathoff Brown ’75 & ’79 was the American Association of Family and Consumer Science’s National Teacher of Merit for 2011. Brown shared the highlights of her Eastern High School Culinary Arts program with other state win-
ders during the summer conference held in Phoenix, AZ. Linda has been the culinary chair for the 4-H National Congress, which is typically held during the summer conference held in Phoenix, AZ. Linda has been the culinary chair for the 4-H National Congress, which is typically held during the summer conference held in Phoenix, AZ.

Debra Larson and Linda Brown.

Robert M. Shirley ’82 M.S. of Carroll County was inducted into the National 4-H Hall of Fame on October 7, 2011. The Maryland 4-H Center was the site of a pre-induction celebration and retired County Director Bob Jones shared some thoughts about Bob’s induction with fam-
ily and friends that gathered. Bob Shirley started his 4-H career as volunteer in Car-
roll County prior to becoming an Extension Agent. He and his late wife, Hank, were the

Dr. Ashley Peterson ’06 PhD has joined the National Chicken Council (NCC) staff as Vice President of Science and Technology. The NCC represents integrated chicken producer-processors, the companies that produce, process market chickens and chicken products. Her responsibilities will include food safety, poultry inspection and animal welfare as well as keeping her finger on the pulse of initiatives within the regulatory agencies. Prior to this position, she served as Vice President of Government Relations for the United Egg Producers (UEP). At UEP, Dr. Peterson worked with Congress and the regulatory agencies on a variety of issues including organic egg production and food safety. Her family served both as the Director of Legislative Affairs and Director of Regulatory Affairs at the American Meat Institute.

Edward Jenkins ’07, Amy Fry Leber ’08, Noah Runnels ’08, and Janet Violette, who are also in the National 4-H Hall of Fame: Richard Angus ’03, Mylo Downey ’02, Dorothy Emerson ’02, Shirley Gris ’06, Edward Hins ’07, Amy Fry Leber ’08, Gene Swackhammer (National Council) ’02, Dan Tabler ’10 and Sherard Wilson ’05.

The University of Maryland’s Innova-
tive WaterShed House has won the highly competitive U.S. Department of Energy Solar Decathlon 2011. Results in the in-
ternational competition were announced Saturday by U.S. Secretary of Energy Steven Chu. The Purdue University team came in second and New Zealand took third.

A team of 200 Maryland students, fac-
culty and mentors from multiple disciplines designed and built WaterShed to blend solar energy efficiency and water conserva-
tion. They drew their inspiration from the Chesapeake Bay. Students and faculty from the College of Agriculture and Natural Re-
sources actively participated in the project.

“The innovation, creativity, skill, vision, cooperation, determination, and, yes, en-
ergy displayed by this team is both remark-
able and a joy,” says University of Maryland President Wallace Loh. "I couldn’t be more proud of their work and accomplishment. These students, faculty and mentors have dedicated themselves to addressing critical needs of Maryland, the nation and other countries. They’re the perfect example of a pre-induction celebration and retired County Director Bob Jones shared some thoughts about Bob’s induction with family and friends that gathered. Bob Shirley started his 4-H career as volunteer in Carroll County prior to becoming an Extension Agent. He and his late wife, Hank, were the

Dr. Wei with Bob Shirley.

foundling leaders of the Hoofbeats 4-H Club. Their children Dan and Sally were very active in 4-H. In 1978 Bob put the wheels in motion to establish the therapeutic riding program in Carroll County and in Maryland. While he is known as the ‘voice of the Maryland State Fair Horse Shows,’ he values all aspects of 4-H. Jones concluded his remarks by stating that “Bob Shirley is the epitome of caring deeply about young people, so it didn’t make a difference what 4-H projects they carried. For him, it was a delight to see that younger grow and develop while Making the Best Better!” Bob joins the following Marylanders who are also in the National 4-H Hall of Fame: Richard Angus ’03, Mylo Downey ’02, Dorothy Emerson ’02, Shirley Gris ’06, Edward Hins ’07, Amy Fry Leber ’08, Gene Swackhammer (National Council) ’02, Dan Tabler ’10 and Sherard Wilson ’05.

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of what a public research university is all about.” The international competition challenges 20 finalist collegiate teams to design, build and operate solar-powered houses that are cost-effective, energy-efficient and attractive. Panels of experts judge the competing entries on ten dimensions, and the Terps came in first overall, placing first in architecture, energy balance and hot water.

The Maryland team was the only one from the state and the Washington, D.C. area, and their performance over the past several days generated growing excitement. “What makes it so amazingly sweet is that the team set goals higher than the Solar Decathlon set for itself,” adds Dean of Architecture, Planning and Preservation David Cronrath. “They not only tackled the need for renewable energy efficiency, but also the huge issues we have with water and food.”

The team worked for two years, putting in many long hours and late nights to imagine, develop and construct WaterShed. Inspired by the Chesapeake Bay, the power of WaterShed’s design comes from its twin focus on efficient, renewable energy and water quality and conservation. It harvests, recycles and reuses water, while harmonizing modernity, tradition and simple building strategies. The house balances time-tested best practices and advanced technological solutions to achieve high efficiency performance in an affordable manner.

AGNR worked with the project, contributing several unique sustainable features including constructed wetlands that filter stormwater and greywater, a green roof to retain rainwater and promote efficient cooling; edible landscapes that support community-based agriculture. President Loh describes WaterShed as “a model for how to live in harmony with the complex ecosystem of the largest estuary in the United States.” The project, “fulfills the mission of a 21st century Land Grant University by applying intellectual resources to make a real-life impact, in this case, contributing to sustainability.”

Other than AGNR, the Maryland Solar Decathlon Team involves students and faculty from the Maryland School of Architecture, Planning and Preservation, the A. James Clark School of Engineering, the College of Computer, Mathematical and Natural Sciences and the University Libraries.

ENGINEERING TEAM COMPETES NATIONALS

The Maryland 4-H Engineering Team had a successful trip to Lafayette, Indiana, for the 61th National 4-H Engineering Challenge in September 2011. The 12-member team participated in individual events and a team of eight competed in the 4-H Engineering Bowl. They also attended educational workshops at Purdue University and educational field trips in the Lafayette area. The event had 56 youth from 10 states competing in nine project areas.

Most of the Maryland team members were state champions in mechanical science events: in Division V, 4-H Engineering Events, at the Maryland State Fair, including tractor operator safety, lawn tractor, arc welding, small engines, electric/energy, computer, robotics and bicycle.

The Maryland team, including Danielle Franck, Logan Hardesty, Patrick McQuay and Nathan Young, was robotics coach. Other members participated and made it into the semi-final round of the engineering bowl. In individual events, third place winners were Joshua Dreesman of Howard County in computers; Levi Lantz of Garrett County in lawn tractors; and Douglas Meege of Cecil County in small engines. Placing fourth were Benjamin Wolf of Carroll County in bicycle and Samuel Zambuto of Cecil County in electric/energy. In arc welding, Mikail Perrine of Garrett County placed fifth and James Rawlings of Carroll County placed sixth. The tractor operator safety event was the largest. Nathan Tichnell of Garrett County placed seventh.

Each event included a written exam, either a presentation or parts identification test and a demonstration of skills component. Dr. David S. Ross, Professor Emeritus and Extension Agricultural Engineer (retired), Department of Environmental Science and Technology, College of Agriculture and Natural Resources, was the Maryland co-ordinator and chair of the National Bicycle Safety Event.

Dwayne Murphy, Faculty Extension Assistant, 4-H Youth Development, Baltimore County, was chaperone and co-chair in the welding event. The Maryland 4-H Foundation, Chesapeake Chapter, American Society of Safety Engineers, Fair View Farm, Maryland State Fair and equipment dealers were local sponsors of this program.

Mike Raupp making a video splash

UMD’s Mike Raupp steals the scene in the latest video releases from the Home

Maryland 4-H Engineering Team

The G-FORCE FTC 2818 team won the Connect Award at the Maryland FTC Championship. Their robotic experiences stretch across the state of Maryland as well as Washington, D.C., Idaho, South Dakota, Mississippi and West Virginia. In front from left, are, Zach Frick, Kasey Berrano, Bryan Bowser, Bryan Rippeon, Max Peterson and a representative from BAE Systems. Not pictured is Josh Frick.
James Kirkley 73.75 & 36, died in a long battle with cancer. He received his PhD in AREC in 1986. He was a professor of marine science at the University of Maryland. He published widely, often with AREC faculty but also with others around the world. Current and former graduate students at Maryland called on Jim for help with fisheries insights and for friendship. He worked with people in fisheries – fisherman, regulators, politicians, government economists, biologists. Unpretentious and generous with his time, Jim has left friends around the world, including many at Maryland.

Louis A. “Lonnie” Malkus ’53 of Bozeman, MT, died Sept. 21, 2011, after a long battle with cancer. He was 74. Born Oct. 20, 1936, in Washington, D.C., he was the son of Louis Malkus and Kathryn (Dille) Malkus. He completed high school at Charlotte Hall Military Academy, received his Bachelor of Science degree in agriculture from the University of Connecticut and his doctorate from Oklahoma State University. Dr. Malkus joined the University of Maryland faculty in 1964 as an assistant professor of animal nutrition and a specialist in meat animal production, and with emphasis on large animals. He was a mentor to students throughout his career and right up until the time he passed away. He was a familiar name among 4-H and FFA members associated with 4-H in New England and around the world. He began his experience with livestock in 1954, working with polled Herefords at Bushy Park Farm in Glenwood, MD, and later at Bay Manor Farm in Lewis, DE.

Livestock producers throughout the northeast recognized Dr. Malkus as an outstanding leader and educator, and he also served as a consultant to the Ministry of Natural Resources in Botsell and as an advisor to the Belize School of Agriculture.

Dr. Malkus has made scientific visits and presentations in seven western European countries, Canada, Mexico, Belize, Guatemala, Costa Rica, Honduras, and Costa Rica. In 1992, he retired to his home in Bozeman, MT, where he served as a consultant. After he retired and continued working at the UMD Wye Research Station for a number of years, he served as an Affiliated Professor of Applied Nutrition (IFSPN), an Affiliated Professor in the Nutrition and Food Science Department and as a consultant to the National Honey Board. He died at his home in Bethesda October 3, 2011.

Dr. Lonnie Malkus was a true mentor to students and colleagues. He was a national leader and educator. He is survived by his wife, Gloria; his son, David; his daughter, Sarah; and his grandchildren. The family requests that memorial contributions be made to the Lonnie A. Malkus Endowed Scholarship Fund at the University of Maryland Foundation.

Alan ‘Jim’ Randolph Miller ’40 died Oct. 3, 2011. Born February 11, 1918, in Woodstock, VA, his family moved to Washington, D.C., where he graduated from Eastern High School where he was a star athlete in football and track. He then entered Virginia Polytechnic Institute and was graduat- ing in 1940 with a degree in agricultural economics. He was a member of the track team, receiving national recognition in the 440-yard dash and medley relay. He also participated in ROTC and received a commission as a Lieutenant in the U.S. Marine Corps upon graduation.

He served in the World War II as a Marine. He served in the U.S. Navy Enterprise, participating in the Battle of Midway and later, the USS Nashville. Upon reaching the rank of Major, he was transferred to land duty and participated in the landings on Guam and Okinawa. After the war, he was attending college, receiving a master’s degree in statistics.

He took a position as a statistician with the U.S. Department of Agriculture’s National Agricultural Service, where he worked for the rest of his career:

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AGNR Alumni Reunion and Awards Celebration
Wednesday, April 18, 2012
Samuel Riggs IV Alumni Center
College Park Campus

- 5:30 social hour and silent auction to support AGNR student clubs and scholarships
- 6:30 dinner is served
- Celebrate accomplishments of AGNR students, faculty and alumni. Graduating seniors will be special guests.
- $40.00 reservations required
- Reservations and more information:
  Gail Yeiser, gyeiser@umd.edu • 301-405-2434
- Facebook page:
  http://www.facebook.com/pages/University-of-Maryland-AGNR-Alumni-Chapter/115419941422

Egg-citing Start to Ag Day / Maryland Day
Saturday, April 28, 2012
Animal Sciences Courtyard

- AGNR Alumni & Scholarship donor breakfast
  8:30 a.m.
- Registration required
- Reservations and more information:
  Gail Yeiser, gyeiser@umd.edu • 301-405-2434
- Over 400 events campus wide and over 60 at AgDay Avenue

State Fair
By Edwin Remsberg
See more photos at http://agnr.zenfolio.com