The College of Agriculture and Life Sciences

SOWS REWARDING CAREERS

Once college graduates turn their mortarboard tassels to the left, they must turn their academic training into practical experience. But bridging the gap between college life and a career is something students who graduate from the College of Agriculture and Life Sciences are well-prepared for, and it’s a process that begins the moment students set foot on campus.

“We do so much more than just educate our students about the topics they are studying, be it human nutrition, soil chemistry, international trade, and food science,” said Susan Sumner, associate dean and director of academic programs. “We prepare students for the many rewarding careers awaiting them by giving them hands-on, experiential learning programs that enrich and deepen their knowledge.”

Katie Harver holds bachelor’s (2009) and master’s (2011) degrees in crop and soil environmental sciences. Harver is a forage and wildlife specialist with Pennington Seed Company and was well-prepared for her career by the classroom and field training she had at the college.

“Virginia Tech provided me with an integrated approach to education that has served me well in my career,” said Harver, 28, of Dunlap, Tennessee. “By providing the base technical knowledge through coursework and hands-on experiences, I was able to confidently enter the workforce.”

Kristen DeAngelis could never have guessed where her career path would go when she graduated in 2013 with a degree in human nutrition, foods, and exercise. Today she is a registered dietitian and travels the world to assist her clients as a personal trainer and nutrition coach focused on health and wellness.

“There are many ways in which the college prepares students as soon as they arrive in Blacksburg. Every freshman participates in a First Year Experience, a one-credit course designed to promote a multidisciplinary perspective. Students engage in the discovery process through research assignments, learn to work independently and in a group, and participate in a final poster session.

For example, Anderson King, a first-year agribusiness major from Berryville, Virginia, worked on a project that examined organic versus conventional livestock farming techniques and the nutritional value of those products. Students are also encouraged to participate in global education programs, where they experience and learn about environmental and resource challenges that affect populations across the globe.

Small classes allow for discussions and mentoring relationships, while ample opportunities exist for undergraduate students to conduct laboratory research alongside world-class researchers. Capstone experiences give seniors the chance to apply what they have learned in an internship environment, further preparing them for the working world.

“At Virginia Tech I was encouraged to seek knowledge and experience both inside and outside of a formal classroom setting,” said Brad Copenhaver, a 2012 graduate with dual degrees in agricultural and applied economics and political science. Copenhaver is now the director of government affairs at the Virginia Agribusiness Council.

Summer credits the bright future of industries related to agriculture and the life sciences to the exceptional group of graduates going out into the world with careers awaiting them by giving them hands-on, experiential learning programs that enrich and deepen their knowledge.”

– Susan Sumner
Associate dean and director of academic programs

Online extras at
http://news.cals.vt.edu/innovations

The lasting impact of John Lee Pratt

The College of Agriculture and Life Sciences

by Amy Lotetter

Secretary of Agriculture and Forestry Todd Haymore (left), Virginia Tech alumnus Brad Copenhaver and director of government affairs at the Virginia Agribusiness Council (center), and former Assistant Secretary of Agriculture and Forestry Carrie Hileman (right) are pictured. Copenhaver credits his academic preparation at Virginia Tech for a successful career that meshes his interests in public policy and agriculture.

Kalynn Harlow (center), a junior majoring in animal and poultry sciences, participated in the First Year Experience, which is one of the ways that students are prepared for future careers in agriculture and life sciences.

We prepare students for the many rewarding careers awaiting them by giving them hands-on, experiential learning programs that enrich and deepen their knowledge.”

HNFE graduate Kristen DeAngelis records a segment in a television studio.
In the College of Agriculture and Life Sciences, we are preparing the next generation of leaders who will help us feed an ever-growing global population. USA Today recently ranked agriculture and natural resources among the most lucrative degree colleges students can earn. This issue of Innovations highlights some examples of how we are getting our students ready for rewarding and challenging careers.

In this edition, you’ll learn about programs such as the First Year Experience course and capstone projects that help undergraduates gain hands-on experiences. For example, you can read about a student working across Virginia to improve water quality, a team of students who networked with industry leaders at the Agriculture Future of America conference, and graduate researchers who have benefited from the college’s scholarship opportunities. Our students have the advantage of being educated by world-class faculty members who help guide their research and bring a wealth of experience to the classroom. CALS students conduct research with scientists who are among the very best in their fields. In fact, the National Science Foundation recently ranked Virginia Tech sixth among all U.S. universities for funding agricultural sciences research and development.

The careers we are preparing students for may very well take them around the world. A two-part series in Virginia Tech Magazine titled “Sowing the Future” examined the ways in which our students and researchers along with Virginia Cooperative Extension faculty members are working to meet the global demand for safe food and a clean environment in the years to come. Please take a look at those stories at www.vtmag.vt.edu.

Virginia Tech President Timothy D. Sands has made inclusion and diversity one of his priorities in his first year, and we are excited to take part in this mission to make the university more reflective of the society we serve. Learn about some of the ways that we are accomplishing this in the college at www.cals.vt.edu/diversity.

I hope you enjoy reading this issue of Innovations. Many thanks to the alumni and friends of the college for all you do for CALS and for helping us prepare for the future.

Sincerely,
Alan Grant
Dean

Alumna learns that people are valuable part of agriculture equation

A typical day for Cassella Slater is anything but ordinary. The 2014 animal and poultry sciences graduate works in Ghana as an AgriCorps member teaching 4-H skills to kids in her village. In the communities where AgriCorps operates, members serve as teachers, agriculture extension officers, and 4-H advisors, using agriculture as a mode for teaching life and livelihood skills. Slater uses classroom techniques, such as group discussion and employing a chalkboard to disseminate information, but she also incorporates the 4-H motto, “learning by doing.”

She regularly takes her class out into the garden where students have started a compost pit and sowed seeds for a germination test.

“So far, the biggest thing I feel I have accomplished is the impact I have made on the students,” said Slater. “They have established goals for their club that are inspiring yet achievable. Some of the students have even started gardens at home, taking what they have learned in school and 4-H and applying it to an entrepreneurial project of their own.”

Among the many ways that the college prepared her for her experience in Africa was the leadership, organizational, time management, and teamwork skills she developed through events and groups such as Youth Swine Day, the Block and Bridge Club, and the Equestrian Club.

“I learned to work with a variety of people and came to understand that even if everything does not go as planned, it does not mean a project failed, only that you can learn even more from the experience,” she said.

Perhaps another lesson Slater has learned is that the people, not her tools, are the most significant part of being an agriculture teacher.

Cassella Slater works as an AgriCorps member in Ghana where she teaches kids about agriculture.

President Sands tours Eastern Shore

Virginia Tech President Timothy D. Sands recently visited the Eastern Shore of Virginia, where he met with area farmers and took a tour of the local Agricultural Research and Extension Center.

“The partnership between Virginia Tech and Virginia agriculture has never been stronger, and our commitment to support agriculture throughout the commonwealth is firm,” Sands told a packed house at the Eastern Shore Ag Conference and Trade Show. “It is where we started, and it is still a major part of Virginia Tech.”

Sands pointed out that the National Science Foundation recently ranked Virginia Tech sixth for funds spent on agricultural research, a move up from seventh place. He also said that one of the university’s strong suits is putting its research into the hands of people through Virginia Cooperative Extension.

Virginia Tech Board of Visitors member Steve Sturgis, along with Alan Grant, dean of the college, and Saied Mostaghimi, associate dean of research, then took Sands to the Eastern Shore AREC in Painter, Virginia, where he met with director Steve Rideout and other faculty members.

There, Sands learned about the research that new faculty member Laura Strawn, an assistant professor in food science and technology, is doing with food safety. He also met with Mark Reiter, an associate professor in crop and soil environmental sciences, who works with farmers to address issues of nutrient and soil management.

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New VCE website provides better access to information

Virginia Cooperative Extension has revamped its online presence with a new website that improves access to research-based knowledge at Virginia's land-grant universities, Virginia Tech and Virginia State University, while also making Extension information more accessible.

The new site, www.ext.vt.edu, features an enhanced homepage with a rotating banner and links to news, upcoming events, training opportunities, and a directory of the 307 local unit offices.

Topic pages were added and serve as the main navigation for the site, allowing users to more easily locate information on various topics, including:

- Agriculture
- Community and leadership
- Natural resources
- Family
- Food and health
- Lawn and garden
- 4-H and youth programs

The topic pages include links to a variety of resources, such as publications, events, websites, videos, webinars, training materials, experts, and other helpful information.

Agritourism can boost farmers’ revenue

A recent statewide study by Virginia Tech found that agritourism is not just a pleasant way to spend a Sunday — it’s also a viable way for farmers to supplement their income.

The study defined agritourism as a value-added activity that generates additional net farm income and creates a loyal consumer base for branded farm products.

“‘In addition to identifying impediments to the agritourism industry in general, the study dealt with a decline of midsize farms in the commonwealth, so finding ways to help the entrepreneur who would be likely to start a farming operation of this size was important,’” said Gustavo Ferreira, assistant professor of agricultural and applied economics and Extension specialist.

The study, which had a response rate of 52 percent, found that half of the farmers who responded described themselves as somewhat profitable while roughly 30 percent identified themselves as very profitable.

How to increase farmers’ profits.

The team came in third place in seed analysis for purity, commercial grain grading, and plant and seed identification and also won third place overall. Team members were all seniors majoring in crop and soil sciences: Robert Longest of Hanover County, Virginia; Lindsay Key, Amy Loeffler, and Jamie Lucero of Arizona and captured the No. 1 spot. The program is available to students in the college any better.

As academics go, two successes last semester by the teams in the Department of Crop and Soil Environmental Sciences and the Virginia Tech Program in Real Estate could illustrate the wide-ranging nature of majors available to students in the college any better.

The 2014 Crop Judging Team did well at the National Crops Judging Contests held in Kansas City and Chicago. The team came in third place in seed analysis for purity, commercial grain grading, and plant and seed identification and also won third place overall. Team members were all seniors majoring in crop and soil sciences: Robert Longest of Hanover County, Virginia; Evan Harver of Richmond, Virginia; Jenna Swanson of Shenandoah, Virginia; and Patrick Ransom of Mt. Airy, Maryland.

Meanwhile, a team of students from the Virginia Tech Program in Real Estate competed in the Meritage Homes Residential Real Estate Challenge held at the University of Arizona and captured the No. 1 spot. The program is headed up by Kevin Boyle, professor of agricultural and applied economics.

The $5,000 prize will be shared among team members Amy Cohen of Virginia Beach, Virginia, a senior double majoring in real estate and finance; Christopher Lomaka of Henrico, Virginia, a junior double majoring in real estate and building construction; Cody Owens of Abingdon, Virginia, a senior majoring in real estate; and Jack Sarske of Long Beach, California, a senior double majoring in real estate and property management.

Programs in real estate and CSES build their academic homes on strong showings at national competitions

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A recent Virginia Tech study found that agritourism, from pick-your-own apple orchards to pumpkin patches, can help increase farmers’ profits as somewhat profitable while roughly 30 percent identified themselves as very profitable.

Forty-two percent of operators surveyed stated that agritourism contributed between 76 and 100 percent of their farm income.
Helping make FOOD SAFE

Taking a food product from an idea to the grocery shelf can be expensive, time-consuming, and even deadly if not done properly.

For more than 15 years, Virginia Cooperative Extension’s Food Innovations Program has been offering technical assistance for food business startups by helping to make sure their products meet safety standards while providing a wholesome food product.

“We serve as a technical advisor for companies that could not otherwise afford it,” said Joel Eifert, director of the Food Innovations Program. “The program strives to increase the awareness of Virginia’s food producers about matters of food safety, food regulations, and concerns associated with starting a food business.”

Formerly known as the Virginia Food Processor Technical Assistance Program, the group housed in the Department of Food Science and Technology offers testing services to ensure the safety of new and existing food products. The program also provides nutrition facts and support for regulatory compliance and inspections. It also helps clients improve their processing techniques and extend product shelf life, which allows for expanded market opportunities.

“Our fees are minimal, which helps keep costs low for new companies entering into the market,” said Eifert.

The program usually works with companies that have already developed a product and want to make sure that their processes are safe.

“If their product were to cause a foodborne illness, it is likely that they would not be able to overcome it,” said Eifert.

The Food Innovations Program has also expanded its mission to support established national and international companies.

“A lot of the food science research we are doing can help these companies,” Eifert said.

“We are pairing our research expertise with companies that have related needs and looking at ways to translate our research into solutions.”

Student creates flood of participation in water quality program

By Amy Loefter

Jacob Cantor’s path to educating residents of Virginia’s Eastern Shore about household water quality started in faraway Oaxaca, Mexico.

A senior from Fairfax, Virginia, majoring in biological systems engineering, Cantor became interested in how his academic training could benefit international development projects. So he volunteered south of the border at the Hunger Project and worked on water quality issues in a small village.

But Cantor wanted to do more. He received funds from the Austin Michelle Cloud Honors Scholarship and thought they would stretch further if he stayed closer to home. He decided to work with water quality issues in the commonwealth through Virginia Cooperative Extension’s Virginia Household Water Quality Program.

The program provides practical information to homeowners about maintaining and protecting private water systems, such as wells, springs, and cisterns.

And Cantor was a big part of the program’s success on the Eastern Shore in 2014.

He raised the participant level of the water quality program by speaking at high schools, farmers markets, and at the local community college to help educate residents about things that can affect private well water quality, including bacteria and other contaminants.

“It was rewarding talking to the people about things that they might not know about but could do to make the quality of their water safer,” Cantor said.

In the future, Cantor says he’d like to continue to work with communities to maintain high standards of water quality.

“It’s really what we do in our everyday activities that makes the difference between poor and sustainable water quality,” he said.

CALS Alumni Organization board of directors elects officers and new board members

At its fall meeting, the CALS Alumni Organization held its biennial election of the executive committee and welcomed three new board members.

The new executive committee consists of Tim VanReenen (AAEC ’06, EDCT ’08) of Hillsboro, West Virginia, president; Dixie Dalton (AAEC ’86, M.S. ’89) of Kenbridge, Virginia, vice president; and Ryan Burnette (BCHM ’99, ’04) of Richmond, Virginia, past president.

 Newly elected board members are Heidi Hertz (HNFE ’04) of Richmond, Virginia; Shane Horsley (APSC ’99, ’02) of Virginia Beach, Virginia; and Rachael Nuzzo (APSC, DASC ’07) of Stephens City, Virginia.

Please visit the organization’s website at www.cals.vt.edu/alumni/cao for biographies of the organization’s leaders.

Thanks to the members of the 2012-14 executive committee, which included Burnette, VanReenen, and Ronnie Gill (AGRN ’82) of Tappahannock, Virginia, for their outstanding service to the organization.

All graduates of any degree program offered by the College of Agriculture and Life Sciences are automatically members of the CALS Alumni Organization. There are no dues to join.

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Agriculture Future of America conference preps students for working world

As a sophomore pursuing a degree in agricultural sciences, Elizabeth Galbreath is learning plenty about the business and science of agriculture. But last fall, Galbreath and other students from the college got to learn about a completely new side of the agricultural world when they attended the Agriculture Future of America conference.

“It really gave me an understanding of what agriculture is on a national scale,” said Galbreath, of Street, Maryland. “I never had an opportunity like that before.”

Susan Sumner, associate dean and director of academic programs, took three students to the Kansas City, Missouri, conference for a whirlwind experience that taught them everything from resume writing and public speaking to dining etiquette and body language — all while networking with some of the most influential leaders in the agriculture industry. AFA provides free conference registration to attendees and partners with universities to assist with travel costs.

“This conference is a great opportunity for our students to apply what they have learned and to develop relationships with the companies that may be their employers in the future,” Sumner said.

That was one of the biggest benefits of the conference, said Michael Granche, a freshman from Catlett, Virginia, who is pursuing degrees in both agribusiness and animal and poultry sciences.

“The conference has absolutely prepared me for my future career,” he said. “One thing that unifies every man, woman, and child on this earth is that we all need to eat. By learning how to feed more people more efficiently, we are better securing our future posterity.”

Hazelwood named new director of student recruitment

Sherry Hazelwood is now the main point of contact for all undergraduate student recruitment for the college and will be the Office of Undergraduate Admissions liaison with community colleges, high schools, and internal and external stakeholders.

Hazelwood started as director of student recruitment on Dec. 1, 2014.

“I’m excited to be back in the recruiting realm,” said Hazelwood. “Knowing that I have a part in helping someone take a step in achieving a big goal is fulfilling.”

Hazelwood will develop teams to enhance recruitment efforts for first-year and transfer students. She has more than 15 years of experience at Virginia Tech in various roles, including as assistant dean of students.

College helps cider industry shine in the commonwealth

Virginia Tech senior Meg McGuire works at Foggy Ridge Cider in Dugspur, Virginia, where she helps process apples used to make hard cider.

Meg McGuire of Dublin, Virginia, a senior majoring in food science and technology, is curious how the crop yield of apple trees affects apple quality and, ultimately, the quality of hard, alcoholic cider.

Cider is one of the fastest growing segments of the nation’s alcohol beverage industry, with production rising from 9.4 million gallons in 2011 to approximately 32 million gallons in 2013, said Virginia Agriculture Secretary Todd Haymore as he announced the designation Cider Week. Thanks to a collaboration of scientists in the college, the commonwealth is poised to capitalize on the exploding hard cider industry in the U.S.

McGuire works with two faculty members — Amanda Stewart, an assistant professor of food science and technology, and Greg Peck, an assistant professor of horticulture and an Extension specialist — to better understand the optimal orchard management practices for hard cider production.

Her goal is to see how much apple yield can increase before it negatively impacts cider quality and thus help growers produce fruit that has a balance of tannins and acids to create a crisp, tart, and refreshing cider.

“Trees with higher crop loads, the nutrients and water are partitioned more sparsely than in trees with lower crop loads. We are trying to figure out exactly how this translates to cider quality,” she said.

McGuire’s field research occurs at the Alson H. Smith Jr. Agricultural Research and Extension Center in Winchester, Virginia, where Peck’s research program is based.

“We are leveraging Virginia Tech’s expertise in horticulture, food science and technology, and agricultural and applied economics to develop research-based resources for the rapidly expanding cider industry in Virginia and North America,” Stewart said. “We are excited that undergraduate students like Meg are finding opportunities to contribute to the land-grant mission through our research and Extension programs.”
Flower POWER

By Amy Loeffler

Barbara Leshyn starts her Floral Design II class lecture on a blustery winter day talking about rhythm, balance, and unity — concepts more closely associated with auditory pleasure, like the guitar riff of a favorite pop song. Music is not far from the mark, however, when considering the way flowers have the ability to affect our moods depending on color, smell, and arrangement.

"Appreciating flowers is an innate human characteristic," said Leshyn, an advanced instructor in the horticulture department. "The smell and beauty of flowers draws us to them."

Her class is an elective, and students from various colleges enroll to supplement their background in horticulture or, pardon the pun, to stop and smell the flowers outside of their major. Abby Youmans, a senior accounting major from Winchester, Virginia, took the floral design class to engage the artistic side of her brain.

"In accounting there’s not a lot of room for creativity," said Youmans. "This class gives me a creative outlet."

Floral design classes are also part of the fabric of the Virginia Tech community. Anyone who has attended a public function at the university has most likely enjoyed the floral bouquets made by students in floral design classes. In the fall students put their creativity to the test by assembling pumpkin-themed arrangements. In spring the students produce arrangements that showcase spring flowers.

"Floral design classes are a good creative outlet," said Leshyn, an advanced instructor in the horticulture department. "The smell and beauty of flowers draws us to them."

"From the beginning of recorded history, people have been using flowers to express grief and joy," said Leshyn.

The other thing that draws us to flowers? You don’t have to know how to play the guitar to appreciate them.

Animal welfare advocate Temple Grandin speaks at Virginia Tech

Temple Grandin, a world-renowned autism activist and authority on animal welfare and behavior, spoke to a standing room-only crowd at the Virginia Bioinformatics Institute on Dec. 4, 2014. Grandin began her speech by emphasizing the importance of mitigating the fear factor in animal production.

"Fear is a scientific word," said Grandin.

She primarily spoke about animal behavior and how to ease stress levels in livestock.

"For many students, regardless of the segment of the industry in which they work, Temple Grandin will have an effect on their business," said David Gerrard, department head of animal and poultry sciences. "As good stewards of agriculture, it is imperative to have a solid understanding of how animals behave and respond to their environments."

Researchers make strides in malaria research

Certain species of mosquitoes are genetically better at transmitting malaria than some of their cousins, a team of Virginia Tech researchers has found.

Of about 450 different species of mosquitoes in the Anopheles genus, only about 60 can transmit the Plasmodium malaria parasite that is harmful to people. The team chose 16 mosquito species currently found in Africa, Asia, Europe, and Latin America that evolved from the same ancestor approximately 100 million years ago.

Today, the 16 species have varying capabilities for transmitting malaria and adapting to new environments. The team sequenced their genomes to better understand the evolutionary science behind the differences.

"With the availability of genome sequences from Anopheles mosquitoes of divergent lineages, variable adaptations, and differing disease-transmission abilities, we now have the exciting opportunity to significantly improve our understanding of these important malaria vectors and develop new strategies to combat malaria and other mosquito-borne diseases," said Zhijian Tu, a professor of biochemistry, who published a paper on his findings in Science.

At the end of each project, student teams publish a Virginia Cooperative Extension fact sheet to inform statewide audiences about real-world applications resulting from their research.

"The agriculture industry is demanding students who have practical, hands-on experience necessary to address the varied responsibilities that fall on agribusinesses," said Katie Frazier, president of the Virginia Agribusiness Council. "The education and real-world experiences that the Kohl Centre provides not only give students this skill set, but also help develop the next generation of agricultural leaders in Virginia and beyond."
New faculty in CALS

From improving crop irrigation methods and building disease resistance in dairy cows to developing new forms of biofuels and ways to combat diabetes, the new faculty members in the college are finding solutions to some of the biggest challenges facing our world today.

Learn more about their exciting research and extension programs at www.research.cals.vt.edu/new-faculty-directory.html

Teen Cuisine splices up nutrition education for Virginia students

By Emily Halstead

Teens across the commonwealth are taking a new approach to nutrition education during Teen Cuisine classes offered by Virginia Cooperative Extension’s Family Nutrition Program. Launched in the summer of 2013, Teen Cuisine was designed to provide young people with cooking classes and information about food safety and nutrition.

“Teen Cuisine has contributed significantly to the increase in nutrition education statewide because, in the past, we haven’t really had a curriculum to offer to older students,” said Lynn Margheim, a Family Nutrition Program trainer. “I think the students like the program because they also get a book that is full of recipes and other practical food safety and nutrition knowledge.”

The six-lesson curriculum — offered to students in grades 6 to 12 — includes a mix of classroom training and hands-on food preparation and cooking.

“Many students tell me that they now prepare family meals at home because of what they have learned from our lessons in Teen Cuisine,” said Kim Russell, a program assistant in Smyth County.

Currently there are 70 Family Nutrition Program assistants conducting nutrition education programs throughout the state. Fifty of those assistants are in classrooms, after-school programs, and summer programs where they can focus on educating youth. “A lot of the career and technical funds are being cut around the state, including many family and consumer sciences classes where the students have the chance to learn about nutrition and to practice food preparation skills,” Margheim said. “Teen Cuisine offers them a short course that administrators and teachers can bring into the schools at a very low cost and have someone else provide the classes for them.”

Innovations survey

In order to better deliver news from the college, we’d like to ask your opinion of Innovations.

Please take a moment to fill out a survey online at http://bit.ly/3F696E8 (the website is case-sensitive and the final letters are 08X) or complete this paper version and mail it to Innovations Editor, 131 Smyth Hall (6904), 665 Ag Quad Lane, Blacksburg, VA 24061. Ten people who complete the survey will be picked at random to win a Virginia Tech T-shirt. To be eligible, please include your contact information in the comment section at the end of the survey.

Thank you for your time and participation.

1. How would you rate Innovations overall?
   - Excellent
   - Above average
   - Satisfactory
   - Poor

2. How frequently do you think Innovations should be published?
   - Under 25
   - 26 to 35
   - 36 to 45
   - 46 to 64
   - 65+

3. What is your main source of information about the college?
   - CALS Connections (alumni e-newsletter)
   - Online – interactive issue
   - Both

4. What topics would you like to see covered in Innovations (choose all that apply)?
   - Academic achievements
   - Alumni achievements
   - Alumni events
   - Research developments
   - Student successes
   - Student volunteer opportunities
   - Other

5. What do you think of the quality of the stories and photos?
   - Excellent
   - Above average
   - Satisfactory
   - Poor

6. How do you prefer to read Innovations?
   - Online – interactive issue
   - Print

7. What is your relationship with the college? Select all that apply.
   - Alumni/alumna
   - Retired faculty/staff
   - Prospective student
   - Parent
   - Student
   - Donor
   - Industry representative
   - Elected official
   - Other

8. What is your age?
   - Under 25
   - 26 to 35
   - 36 to 45
   - 46 to 64
   - 65+

9. How many stories do you read in Innovations?
   - 1-2
   - 3-4
   - 5 or more

10. How many times have you downloaded recent Innovations?
    - Less than 15 minutes
    - 15-60 minutes
    - More than an hour

11. What topics would you like to see covered in Innovations (choose all that apply)?
    - Academic achievements
    - Alumni achievements
    - Alumni events
    - Research developments
    - Student successes
    - Student volunteer opportunities
    - Other

12. Do you think that Innovations strengthens your connection to the college? If so, how?
    - Keeps me informed about what’s happening around the college
    - Helps me feel more in touch with alumni
    - Encourages me to support the college
    - Keeps me informed about what’s happening around the college
    - Other

13. Do you receive the monthly alumni e-newsletter, CALS Connections?
    - Yes
    - No

14. How many stories to do you read in CALS Connections?
    - 5 or more
    - 3-4
    - 1-2
    - None

15. Do you ever forward CALS Connections to someone else?
    - Yes
    - No

16. What is your main source of information about the college?
    - Innovations
    - Social media
    - CALS Connections (alumni e-newsletter)
    - Other

17. What is your relationship with the college? Select all that apply.
    - Alumni/alumna
    - Retired faculty/staff
    - Prospective student
    - Parent
    - Industry representative
    - Elected official

18. What is your age?
    - Under 25
    - 26 to 35
    - 36 to 45
    - 46 to 64
    - 65+

How can we improve Innovations?

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
G.W. Carver Program promotes diversity and inclusion

When Shavvon Whiten started her Ph.D. in entomology at Virginia Tech, she found more than just an academic home — she found a place where she feels at home. “Virginia Tech has a great environment where I can learn and grow while feeling like I’m in a supportive atmosphere where I can identify with other minority students,” said Whiten, whose passion for entomology and molecular toxicology complement each other perfectly in Professor Dini Miller’s bed bug laboratory.

Whiten is one of the members of the George Washington Carver Program for graduate students. The program provides assistantships to students from historically black colleges and universities, Hispanic-serving institutions, tribal colleges and universities, and historically black colleges and universities.

Shavvon Whiten is one of the members of the George Washington Carver Program for graduate students. The program provides assistantships to students from historically black colleges and universities, Hispanic-serving institutions, tribal colleges and universities, and historically black colleges and universities.

The lasting impact of John Lee Pratt

By Zeke Barlow

John Lee Pratt never set foot in Eric Wong’s laboratory, but his presence is felt there every day.

Pratt is there in the microscopes and thermal cyclers that Wong uses to solve issues surrounding nutrient uptake in young chickens and to develop ways to overcome infections naturally found in the birds.

The graduate students who work alongside Wong examine some of the biggest challenges facing the poultry industry, and their laboratory training is possible because of the legacy of John Pratt. Undergraduate students are gaining hands-on experience in Wong’s laboratory because of the Pratt Endowment.

“The legacy and funding that John Lee Pratt left behind have a real and meaningful impact on my work every day,” said Wong, a professor of animal and poultry sciences. “So much of the research we do has been made possible by the Pratt Endowment.”

More than 50 years after Pratt gave his first gift to the college, both the monetary value and the impacts of his contributions have grown. Today, the John Lee Pratt Endowment is the largest endowment fund in the college, and it continues to support essential research and training in animal nutrition.

“It is hard to overstate the importance or impact of this gift,” said Said Mostaghim, the associate dean of research in the college who oversees the fund. “From supporting undergraduate research projects to funding graduate students to paying for valuable scientific equipment, the fund has allowed us to grow the field of animal nutrition in a way that advances scientific knowledge and has a direct benefit to industry.”

And it all started in the 1940s when Pratt had a sick cow.

Pratt, of King George County, Virginia, was a chemical engineer for some of America’s largest companies, but he always maintained his love for farming. As a child, he would help his family work on their farm. As an adult, when his cows became ill, he was certain it had to do with their diet. His conversations about the importance of understanding nutritional biochemistry encouraged the director of the Virginia Agricultural Experiment Station to start the Department of Biochemistry and Nutrition in 1952. Shortly thereafter, Pratt gave $100,000 and then $150,000 more to support the department’s work.

When Pratt died in 1975, his estate gave $11.5 million to the Virginia Polytechnic Institute and State University’s College of Agriculture and Life Sciences. The money for agriculture was to be used to promote the study of animal nutrition.

Today, the original $5.75 million contributed to the College of Agriculture and Life Sciences is worth more than $22.5 million. In a time when federal research dollars continue to wane, these funds are more important than ever for supporting research of direct relevance to animal nutrition.

When Pratt gave $100,000 and then $150,000 more to support the department’s work, he received from the Pratt Endowment.

Graduate student Ben Zhu (left) said the funds help him concentrate on his research.

“Promote the study of animal nutrition.”

The George Washington Carver Program helps Shavvon Whiten achieve her goal of earning a Ph.D.

The last impact of John Lee Pratt by the numbers

- **185** Graduate students who have received stipends over the last 10 years
- **$2.7 million** Amount spent on research equipment over the last decade
- **60** Number of undergraduates who receive funding annually
- **4x** Amount the fund has grown since the initial investment

Graduate student Ben Zhu (left) said the funds he received from the Pratt Endowment helped him concentrate on his research.

I want to be a role model for minority youth interested in science and show them that an advanced education in science is a possibility,” she said.

The funding helps Whiten focus on her work, and it has also inspired her to share her success story with other budding scientists.

“I want to be a role model for minority youth interested in science and show them that an advanced education in science is a possibility,” she said.

The George Washington Carver Program helps Shavvon Whiten achieve her goal of earning a Ph.D.

HTTP://NEWS.CALS.VT.EDU/INNOVATIONS