Visiting Senegal to “Feed the Future”

The U.S. Agency for International Development awarded Virginia Tech $28 million to improve the system of agricultural education at the college level in Senegal as part of the “Feed the Future” initiative. During the winter term, 13 students and four faculty from the college traveled to Senegal, where they planted vegetables and trees, made silage, and purified water. Students were able to understand the initiative from a multitude of perspectives and developed an appreciation for the complexities of global issues.

HNFE students participating were Samantha Adas, Paige Macauley, Aubrey Stephenson, and Daniel Vanden Hoek, along with faculty member Renee Eaton.
Bill Barbeau: amazing researcher, teacher, friend

On June 28, 1985, Bill and his wife Irma arrived in Blacksburg on their 10th wedding anniversary with their young daughters Sarah and Rebecca in tow. Almost 30 years later, he retired at the end of fall semester 2013.

His original research focus was the extraction and potential animal/human food uses of rubisco, a protein extracted from the chloroplasts of green leaves. He presented his research findings at “Leaf-Pro” conferences in Italy (1989), New Zealand (1993), and Russia (1996). However, his focus shifted in the mid ’90s to cereal proteins, collaborating with Crop, Soil, and Environmental Sciences faculty. Ten years later, he taught himself immunology, which led to researching food allergies, celiac disease, and the idea that wheat gluten proteins are involved in autoimmune diseases, like type 1 diabetes. He was fascinated by this idea and the science surrounding it.

Of all the classes Bill taught over the years, he enjoyed teaching Science of Food and Experimental Foods the most. Bill’s favorite experiences include taking students on the Food, Nutrition, and Wellness Tour and listening to student presentations, such as the Science of Food debate, food product development team competition, and Experimental Foods research findings.

Bill thanks his family for their love, support, and encouragement. He also thanks the HNFE faculty and staff for their help and for listening patiently to all of his stories! It was his privilege and pleasure to teach, advise, and interact with all of the students, past and present.

Bill and Irma will be in Blacksburg for a while before traveling to Maine and abroad; he also now has more time to focus on creating more masterpiece paintings! Stay in touch with him at barbeau@vt.edu.

Bill Barbeau teaching his last Science of Food class ever!

Bill and Frank: two great friends who taught thousands of HNFE students over the years. They will be greatly missed!
Frank Conforti: he cooked, baked, and taught like no other

Frank Conforti “re”-retired this past spring after spending 23 years in the department — 20 as a teacher and three completing his Ph.D.

Frank started out with a chemistry degree, but he loved to cook and bake, so he headed back to the classroom. After completing his master’s in nutrition, he taught foods for the New York City board of education. In 1975, he landed his dream job with Borden’s Flavor Department Quality Control, eventually becoming director. He joined American Foods after Borden’s closed, but when the company moved, he decided a Ph.D. was his next step.

After completing his degree, Frank was asked to help teach Food Selection and was hired full-time later that fall. In 1991, he developed a lab manual to accompany the food prep course; a much-revised version is available on amazon.com. He truly enjoyed teaching, and his Food Selection & Preparation class/lab was — and continues to be — one of the most popular classes in the history of the department. Frank made lasting friendships and saw many students go on to illustrious careers. He received the College Teaching Award in 2002 and a Department Teaching Award last spring.

So far, Frank is enjoying retirement and has plans to travel, including a trip to Disneyworld to add to his all-things Disney collection. He made lasting friendships and saw many students go on to illustrious careers. He would love to hear from you, so email him at fconfort@vt.edu!

Bill Herbert: busier than ever

Back in 1971, Bill developed the first exercise physiology laboratory and worked with other faculty to establish the exercise science curricula in the Division of Health, Physical Education, and Recreation. Early in his career, he helped develop the Cardiac Therapy & Intervention Center (CTIC). For more than 20 years, the CTIC brought cardiac rehabilitation and health/fitness services to hundreds of patients throughout the New River Valley and valuable practicum training for students interested in pursuing healthcare careers.

He still devotes time and energy to research and student mentoring, even after spending 37 years with Virginia Tech. Bill is currently collaborating with the Virginia Tech Transportation Institute (VTTI) to examine how chronic disease risks (aging and obesity/related sleep disorders) influence motor vehicle crash risks. One of Bill’s collaborators at VTTI is Erin Mabry — one of his former advisees and a Ph.D. graduate of HNFE. His final Ph.D. advisee is Kyle Creamer, who will soon defend his dissertation on the effects of bariatric surgery on skeletal health of morbidly obese patients.

Bill is also serving as science web-content editor for the American College of Sports Medicine (ACSM), which involves monitoring topics and finding experts to write about exercise, sports medicine, and health policy. Each week, commentaries are shared with 50,000 people through ACSM’s e-Sports Medicine Bulletin.

Just to keep it all in the family, three of Bill’s granddaughters have academic connections to HNFE. Patricia Herbert graduated from HNFE in 2010 (and will soon graduate with a Doctor of Physical Therapy degree from Lynchburg College), and her two sisters — Katie (a senior) and Maggie (a sophomore) — are current HNFE majors who also plan healthcare careers.

Bill would enjoy hearing from his former graduate students; email him at williamherbert@verizon.net.
Chrissie Chawanje Mughogho, a Fulbright Scholar, rose through the academic ranks at the University of Malawi to become the first woman dean of applied sciences. She was a strong advocate for the improvement of the education of girls and had a diplomatic career from 2005-2012.

Looking back, it is amazing that she came so far and accomplished so much; her greatest challenge was getting the 12 years of education that Americans get for free. Born in Malawi to a mother with only four years of education, society expected her to quit school and marry after puberty. Chrissie could have easily been another young married Malawian girl...except her mother was determined that her daughter’s life would be different.

Life in a typical Malawian village was not easy; most of the day was spent walking miles gathering supplies and water and preparing food. Women did chores and raised children while their husbands and sons sat, watched, and did little. It is easy to see why day-to-day survival was more important than attending a costly school located miles away.

Because schools lacked running water and toilets, most girls typically stayed home one week every month after puberty. This resulted in getting behind with studies and, combined with the expectation to complete the usual chores, made any academic achievement truly impressive. This was the time most girls gave up and quit, but not Chrissie, who managed to walk 10 miles round-trip — usually on an empty stomach — for the first eight years of her schooling. She was determined to excel, and to keep her resolve strong, she only had to look at the pervasive poverty surrounding her.

Paying for school was dependent on two main things: family contributions and a grant from the local school council, awarded because of Chrissie’s excellent academic record. She was eventually selected to attend a girls-only Catholic boarding school, one of the best secondary schools in the country. Later, she was one of 20 women to receive a government scholarship to the University of Malawi and graduated with a double major in biology and chemistry.
Chrissie refused to stop learning and continued looking for other educational possibilities, never giving up despite many roadblocks along the way. She received a master’s program scholarship to Ball State University from the Institute for International Education in New York (The African Graduate Fellowship Program). After completing her degree in biology and education, she returned home to teach. In 1994, she received a Fulbright and was admitted to Virginia Tech as a Ph.D. student in food science and human nutrition under Bill Barbeau. She chose this option, which complemented her background in science and education, to help change rampant malnutrition in rural Malawi.

Later, she became the first woman vice-principal at the Malawi Polytechnic, and then the first woman Dean of the Faculty of Applied Sciences. In March 2005, the Malawian government appointed her as their ambassador to Zambia. While serving in this role, she was accredited to Angola on a non-residential basis and served as Malawi’s permanent representative to the regional trading bloc Common Market for Eastern and Southern Africa (COMESA). From 2010-12, she was Malawi’s ambassador to India and Bangladesh. She later returned to UM as associate professor in food science and nutrition.

Today, there is still a long way to go before gender equality is accepted, even though some male leaders have opened doors by appointing deserving women to leadership roles. Chrissie felt her training equipped her to meet such challenges head on and was deeply indebted to the education she received both at home and abroad.

In her personal life, she was a divorced mother of three who made sure her children (and many others) got a good education. Chrissie was determined to continue the cycle of learning by educating others, who in turn would help someone else. Chrissie’s daughter Linda is an epidemiologist with UCB Biosciences, her daughter Zohra is a customer value development leader with Airtel, and her son David is a Gospel musician who recently graduated with a degree in Theology. Her children say their mother inspired, supported, and encouraged them at every turn.

At the time of her death, she was working to establish career advising centers for young women. To Chrissie, education was the key to a life well lived, and she lived to make a difference to others. She truly embodied “UT Prosim.”

We are thankful to have known her.

Chrissie was interviewed by Zambian journalists; she was with other female ambassadors visiting women-owned small-scale gemstone and mineral mines.

More pictures of Chrissie are on the department’s Facebook page: www.facebook.com/VTHNFE
Awards & Honors

**Nicolin Girmes-Grieco** (M.S. ’01), 2013 CALS Certificate of Teaching Excellence, 2013 and 2014 Housing & Residence Life Favorite Faculty: An instructor in the department since 2008, Nicolin generates excitement in the classroom by feeding her own passion for learning, as well as serving as a fountain of knowledge for her students. Balance, moderation, and variety are the cornerstones for living a healthy lifestyle and comprise her teaching philosophy. Nicolin loves teaching and is passionate about human nutrition.

**Heidi Hertz** (B.S. ’04), 2013 Outstanding Recent Alumna: As the Obesity Prevention Coordinator for the Virginia Foundation for a Healthy Youth, Heidi manages funds related to childhood obesity prevention activities. Her mission is to promote healthy communities through increasing access to healthy and nutritious foods, opportunities for physical activity, and preventing and reducing obesity.

**Kiley Petencin** (B.S. ’13), 2013 CALS Outstanding Ambassador: An ambassador leader who chaired committees, raised funds, participated in service learning trips, and a major spokesperson for the Civic Agriculture and Food Systems minor, Kiley’s resume included multiple examples of health and fitness-related activities, community service, outreach, and issues pertaining to diversity and social justice.

**Kristen DeAngelis** (B.S. ’13), 2013 Outstanding Senior: Kristen was president of the Student Nutrition and Dietetic Association, established the inaugural HNFE student newsletter, implemented a sports nutrition program for the Women’s Rugby Team, and volunteered with an area school’s lunch health program. She is currently an intern at Ingalls Memorial Hospital in Chicago and is working with Wellness Guides, a company that does both in-person and technology-based nutrition consultations.

**Olivia Ellis** (B.S. ’14), 2014 CALS Outstanding Ambassador: Olivia has an overwhelming passion for Virginia Tech and truly embodies the Hokie Spirit both academically and personally. She has represented the college in many events and organizations, is the student director of the university’s Extended Orientation Program, has served as a student speaker at VT Open House, is a VT FLEX mentor, and is a member of Alpha Phi Omega National Service Fraternity. During her ambassador duties, she was positive, dependable, and enthusiastic. Olivia’s personal mission statement is to “enhance lives by encouraging healthy lifestyles through fitness and nutrition.”

**Shannon Lloyd, 2014 Outstanding Senior: Shannon** participated in Fralin’s Summer Undergraduate Research Program, excels academically, and volunteers for numerous health and nutrition events. She is a National Eating Disorder Association Trained Navigator and organized Virginia Tech’s first Eating Disorder Awareness Walk. She was also a student liaison to the International Federation of Eating Disorder Dietitians, volunteered with the Children’s Miracle Network, and participated in a local elementary school’s diabetes walk-a-thon. Shannon was just accepted into the Dietetic Internship program at Texas A&M University, where she will also pursue a Ph.D.
Nancy Rodriguez (B.S., ’78), 2014 Outstanding Senior Alumna: Nancy is a registered dietitian and a professor at the University of Connecticut. A fellow of the American College of Sports Medicine, she is well published with a long history of extramural support. She is also a member of the President’s Council on Fitness, Sports, and Nutrition, and one of her goals is to promote physical education. “PE is no longer mandated in school curriculums in the country,” Nancy says. “If you want to say every kid should be active and moving, it should be embedded in the curriculum.”

Courtney Robert Pinard (Ph.D. ’10), 2014 Outstanding Recent Alumna: Upon completing her Ph.D., Courtney was offered the role of Research Scientist with the Gretchen Swanson Center for Nutrition, and during her short career she has contributed to 30 refereed presentations and posters and 13 peer-reviewed publications. She is also an expert panel member on the National Cancer Institute’s Food, Activity, Sun-Safety, Sleep, and Tobacco Survey team. Courtney’s current research focus is access to healthful foods for low-income families and health surveillance. Her research advisor was Paul Estabrooks.

2013-14 HNFE Scholarship & Award Winners

Anthem BC/BS Hokie Spirit Scholarship
Rachel Bilo          Tonya Castagna
Taylor Cugini        Erika Moscoso
Brittni Woolwine     Greg Rodden

Mike Houston Memorial Scholarship
Angela Anderson

George A. Oley Fund for Excellence
Danielle Anderson

Brenda Harmon Rohe Dietetic Scholarship
Mallory Foster       Lauren Jaeger
Kelsey Rae Tripp     Brittni Woolwine

Margaret Hepler Summer Research Fellowship
Nabil Boutagy        Kyle Flack
Karissa Grier        Longhua Liu
John Kavanaugh       Grace Wilburn

P. Howard Massey International Scholarship
Alexandra Higgins    Lauren Kennedy
Paige Macauley       Anna Nooe

Carol A. Papillon Dietetics Scholarship
Mallory Foster       Anna Nooe

Don Sebolt Fitness/Wellness Research Award
Shaun Riebl

Graduate student Lauren Kennedy, who received the Massey International Scholarship, traveled to Vietnam and Thailand last summer to do research with limited-resource mothers. Her photographic exhibition of her time and research in Vietnam was presented at the college’s Dean’s Forum on Global Engagement in March.

Lauren is grateful for the scholarship, which helped make this opportunity happen!
Adventures start with real food for fuel

Kristen Chang (B.S. ‘10, M.S. ‘11, Dietetic Internship ’12) is a registered dietitian who wears a lot of hats at Warm Hearth Village, a continuing care retirement community in Blacksburg. She co-manages a team of 20 food service employees and hosts nutrition classes for independent-living residents and employees, all while improving the nutritional status of skilled nursing, long-term care, and assisted-living residents. Though she stays busy, Kristen enjoys being a positive, willing mentor to dietetic interns and undergraduate nutrition students. In addition to all of her professional accomplishments, Kristen is an avid runner and triathlete, and recently returned from Haiti, where she was able to provide nutrition services at a mobile clinic for a rural community in need.

Read her blog http://realfoodforfuel.blogspot.com/ and follow her on Twitter @RealFoodforFuel.

Sports Nutrition

Alumni Jennie Schaefer Zabinsky, MS, RD (B.S. ‘09, Dietetic Internship ‘10) became Tech’s Director of Sports Nutrition three years ago, and works with all of the university’s varsity sports. Her position is unique and involves individual counseling, team talks, body composition analysis, grocery store tours, training table menu planning, travel meal arrangements, and managing the athletes’ fueling stations.

As one of 45 full-time registered sports dietitians at 39 schools across the country, she is also dedicated to providing experience and mentoring to our students and interns who are interested in this career path.

Follow the nutrition staff on Twitter @HokieFuel.

HNFE student athletic trainers keep Hokie athletes moving

Kristi Kem is one of about 55 student athletic trainers from HNFE who help the university’s athletic teams excel while gaining experience for their own careers. Majors from HNFE make up the bulk of Virginia Tech’s student athletic trainers, and they do everything from giving massages and ultrasounds to monitoring practices for injuries and filling water bottles. Certified athletic trainers always supervise students.

“Students love this program because it gives them hands-on experience that they can’t gain anywhere else,” said Renee Eaton, HNFE undergraduate program director. “Many of our students go on to be physicians, physician assistants, physical therapists, and professional athletic trainers, and they say that their experience here was invaluable.”

Student athletic trainer Kristi Kem wraps a Hokie football player’s hand before practice.

Though students can receive up to three credits for being trainers, many continue to work with the teams long after they have earned their credits because they like it so much. Students say the work is not easy, but it is always rewarding.
Destination: China

Last June, HNFE offered its first-ever summer abroad in China, “Integrated Health at Beijing University of Chinese Medicine.”

Students studied in an authentic Chinese learning environment, had lectures relevant to Chinese medicine and health promotion, visited affiliated hospitals and clinics, and toured various institutes.

The group also visited the Great Wall, the Temple of Heaven, the Forbidden City, and other famous places.

Smiling New Faces

Donna Brock is the new project coordinator working with the behavioral and community research group, replacing Terri Corsi who moved to Greenville, S.C., last fall. Donna has been providing evaluation and consulting services to regional community service boards for more than five years, has an M.S. in experimental psychology, and 15 years experience in research and evaluation.

Amy LaFalce is the new northern site director for the VT internship in nutrition and dietetics, replacing Susan Moore, who held the position for eight years. Amy has degrees in both dietetics (B.S.) and exercise science/kinesiology (M.S., B.S.). She is a past president of the D.C. Metro Area Dietetic Association and was awarded their “Recognized Young Dietitian of the Year.”

Tyrone Lane (B.S., ’08) replaced Whitney Edmister as academic advisor in Undergraduate Advising. Tyrone received his M.S.W. from Radford University in 2012 and previously worked as an advisor and counselor with their College of Humanities and Behavioral Sciences at Radford.

More about Matt Hulver, HNFE Department Head:

Teaches: Metabolic Nutrition to approximately 250 undergraduates each year; has taught three other graduate courses

Researches: Nutritional impacts on skeletal muscle metabolism in obesity and type 2 diabetes

Leadership: Former Graduate Program Director; Scientific Director/Principle Scientist for Integrated Life Sciences Building; and Director, VT Metabolic Phenotyping Core

Education: Marietta College (B.A. in Fitness Management), McDaniel College (M.S. in Exercise Science), University of Kansas (Ph.D. in Exercise Physiology), East Carolina University (Postdoctoral Fellowship)
Leadership role helps foster healthier people, healthier environments

Janet Rankin has served on the executive committee of the American College of Sports Medicine for the last three years in various roles, including a term as president.

The organization has a mission to integrate “scientific research to provide educational and practical applications of exercise science and sports medicine,” and Rankin has gone a long way toward fulfilling those goals.

She chaired the committee to organize the group’s annual meeting with more than 5,000 attendees. She also spearheaded an initiative called ActivEarth, which focuses on the convergence of physical activity, health, the environment, and economic development. This program is dedicated to promoting active transportation through accessible and safe walking and biking options as a means to better health and environments and more sustainable economies.

These are all issues that are vital to the health of our nation, and ones her current students are passionate about. “This is critical to so many health professions and can help to solve many of society’s biggest challenges,” she said. “Students get that and want to be part of that.”

Seeking a solution for a fatal muscle disease in children

Robert Grange and graduate student Jon Doering are researching a fatal congenital childhood disease known as X-linked myotubular myopathy.

Children born with this disease, which affects about one in 50,000 male births, have very weak skeletal muscles, causing them to appear floppy. They also have severe respiratory difficulties. Survival beyond birth requires intensive support, often including tube feeding and mechanical ventilation, but effective therapy is not available for patients, and most die in childhood. Through demonstrating dramatic improvement in muscle function in dogs, a research goal is to ultimately achieve similar results in children.

The findings appeared as the cover story in the January 22, 2014, issue of Science Translational Medicine, and demonstrated the feasibility of future clinical trials of gene therapy.

“Functional improvement was truly remarkable, and it was both incredibly exciting and humbling to contribute to such a meaningful project — a true highlight of our careers.”

—Robert Grange
Congratulations to the HNFE graduate students who completed their degrees in 2013!

**Ph.D. Graduates:**


**Clarice Waters**, BCS*, “Exploring the Food and Physical Activity Environments and Their Influence on Healthy Behaviors”

**Tim Werner**, CPM*, “Effect of Nebivolol and Lifestyle Modification on Large Artery Stiffness in Middle-Aged and Older Hypertensive Adults”

**Kacie Allen**, BCS, “Developing and Testing Smartphone Game Applications for Physical Activity Promotion in Adolescents”

**Jessica Mabry**, CPM, “Associations Between Obstructive Sleep Apnea Risk and Physical Activity, Metabolic Syndrome, and Exercise Capacity and Responses in Elderly Abdominal Aortic Aneurysm Disease Patients”

**Angela Anderson**, MCS, “Characterization of Metabolic Differences in Benign, Slow Developing, and Tumor Initiating Ovarian Cancers”


**Mary Baugh**, BCS, “Are There Sex Differences in Behavioral Predictors of Successful Weight Loss Maintenance?”


**Josh Pittman**, MCS, “Acute Activation of Inflammatory Pathways Impairs Postprandial Metabolism of a High Fat Meal”

**Jon Doering**, MCS, “Sphingolipids Modulate the Inflammatory and Functional Response in mdx Mice”

**Adrienne Clark**, CPM, “Is Increased Water Consumption Among Older Adults Associated with Improvements in Glucose Tolerance?”

**Lauren Noel**, BCS, “The Role of Health Literacy in Teach Back Performance, Intervention Engagement, and Perceptions of Intervention Components”

**Nicoie Olive**, BCS, “Assessing the Children’s Food Environment in a Health Disparate Region”

**Felicia Reese**, BCS, “Implementation and Evaluation of a Community Gardening and Nutrition Program Among At-risk Youth”

---

* Molecular and Cellular Science (MCS)  |  Behavioral and Community Science (BCS)  |  Clinical Physiology and Metabolism (CPM)

---

**In Memoriam: Ann Hertzler, professor emerita**

Ann, who retired from the department in 2001, passed away from cancer on February 6, 2014. Ann was an Extension specialist during her two-decade career who also taught a number of undergraduate and graduate courses. She was a noted researcher in the area of community nutrition, and her career was distinguished with numerous awards, including being a Fulbright Scholar to Australia from 1989-90.

Her work focused on nutrition issues facing families and children, and she maintained her passion for that subject even after retiring in 2001. She continued to publish research, and was a generous donor to Virginia Tech University Libraries, which benefits from the Ann Hertzler Endowment for Children’s Cookbooks and Nutrition.

A native of Pennsylvania, she earned a bachelor’s degree in home economics education from Penn State in 1957; a master’s degree in nutrition from Drexel University in 1960; and a Ph.D. in nutrition, with a minor in sociology, from Cornell University in 1973.

Ann joined the faculty in 1980, having previously served as an associate professor and Extension specialist at the University of Missouri. She had retired to Wilmington, N.C.
It’s a bird! It’s a plane! No, it’s HNFE graduate Paul Darnell!

Paul Darnell (B.S., ’05) was the stunt double for Henry Cavill in 2013’s “Man of Steel.” As a former member of VT’s gymnastics team, he laid a solid foundation for a career of flying and leaping on-screen—movements that require knowing how his body works and how to feed it to perform optimally when the cameras roll.

Paul has come a long way since his first part, a straight-to-DVD production titled “Evilution” in which he played a free-running zombie. He has gone on to appear in major blockbusters such as “Twilight,” “You Don’t Mess With the Zohan,” and “Captain America: The First Avenger.” Look for him next in “300: Rise of an Empire.”

Read the full interview: http://www.vtnews.vt.edu/articles/2013/07/072413-cals-superman.html