Hello from Human Nutrition, Foods and Exercise!

As we moved into our 51st year, our department continues to thrive. Our faculty are excelling in the department’s mission of promoting health and wellness with an emphasis on translational science, service to the community, and providing a quality education to our students. Faculty are receiving grant funding in record numbers and collaborating in HNFE, the university, and beyond.

I’d like to highlight a few of our achievements and updates:

- **Fabio Almeida** and **Zhiyong Cheng** joined HNFE as tenure track professors.
- **Rob Grange** is now the assistant department head.
- **Janet Rankin** was elected the 56th President of the American College of Sports Medicine.
- **Multi-million dollar awards** were received from both NIH and the USDA.

As we work toward the next 50 years, we seek to impact the many health challenges facing our nation. I am confident our faculty, students, and alumni will find creative and viable solutions.

I encourage you to send us your news and updates; we value these connections.

Have a wonderful summer!

Susan Hutson
Teach, Plant, Grow, Care ... and really be local

Community nutrition, taught by Elena Serrano, is a required course for the dietetics undergraduate option. Students learn to apply nutrition and physical activity principles to community-based programs.

Graduate student Katie Span coordinated the placement of 35 students into various service learning sites that had missions related to food, nutrition, and health. Community partners included a local farmers market, a childcare center, a berry farm, a trailer park, and a women’s center. Students could also create their own learning experience.

Service learning represents a win-win scenario for students, community partners, and instructors.

Comments from community partners:

“It was a pleasure to get to know the students and a testimony to your teaching that you are sending such good people into the community!”

“I learned a lot from this student: she often told us about what she was learning.”

Student journal reflections:

“People often talk about going to third-world countries to serve, but we have a great need for service in our own backyard.”

“People don’t just want sympathy, they want to be understood and empowered. It’s extremely hard to relate to a person, to empathize, if you can’t get past feeling sorry for them.”

“[Local service] opened my eyes that identifying the target audience is not enough; you need to identify the appropriate way to reach people to be effective.”

Small steps lead to a good beginning...

Elena Serrano and Mary McFerren, in partnership with Jennie Fisher from Temple University (primary investigator), received a five-year, $3.7 million grant from the USDA, “Environmental and Behavioral Portion Size Strategies to Help Low-Income Mothers Reduce their Preschoolers’ Intakes of Solid Fat and Added Sugar.”

The goal is to prevent obesity in low-income preschoolers and promote age-appropriate food portions by using smaller cups, bowls, and plates. A state-of-the-art nutrition education program will be developed and evaluated within urban Virginia locations for mothers participating in SNAP-Ed (a federal/state partnership that supports nutrition education for persons eligible for the Supplemental Nutrition Assistance Program).

Serrano was recently selected to the USDA Nutrition and Health Committee for Planning & Guidance for a three-year term.
Graduate Program news

Graduate students now have three tracks available for study: Molecular and Cellular Science, Clinical Physiology and Metabolism, and Behavioral and Community. All students will now take two newly developed core classes. One course covers an overview of pertinent subject matter within the various disciplines. The second educates using a team science concept, bringing together students from different disciplines.

The program successfully hosted the first annual HNFE/Integrated Life Sciences Student Research Symposium in April. The forum, for HNFE and ILSB resident graduate and advanced undergraduate students, showcased and shared research findings. For more information on our programs, contact HNFEgrad@vt.edu.

Faculty/staff updates

Fabio Almeida was recently promoted to assistant professor; he has been with the department since 2007. His research focuses on the study of social relationships and its influence on the implementation of health behavior policies, practices, and programs using social network analysis and interactive technologies.

Zhiyong Cheng came to HNFE in April as assistant professor from Harvard Medical School. Zhiyong has a long-standing interest in the molecular mechanisms underlying mitochondrial dysfunction in diabetes, obesity, and cancer, with the hope to identify molecular targets to treat metabolic diseases.

Recent promotions to associate professor with tenure: Jamie Zoellner (2012), Matt Hulver (2011), and Young Ju (2011).

Susan Clark transferred to horticulture and is also an adjunct for HNFE.

Meredith Ledlie is the new community nutrition coordinator.

Stephanie Nelson (B.S. ’03), joined the advising center as an academic counselor.

Carol Papillon was president of the Virginia Dietetic Association for 2011-2012, and Heather Cox chaired the annual meeting.

Yaru Wu and Valisa Hedrick are recent post-doctoral fellows.

Haiyan Zhang and Louise Zheng joined the department as research and laboratory specialists.

A community emerges into health

The Danville area boasts some of the highest rates of obesity, diabetes, and cardiovascular disease in the state. To address these issues, researchers Jamie Zoellner and Jennie Hill, along with regional community members, formed the Dan River Partnership for a Healthy Community (DRPHC).

The DRPHC has implemented physical activity and nutrition projects that better understand obesity and provide healthy lifestyle initiatives for residents. Primary intervention plans are health-related social marketing campaigns, community gardens, and social support for physical activity.

The community-based participatory research consists of approximately 25 organizations and 50 members from the region. Check out their website: www.drhealthycommunity.org.

Dietetic Internship prepares leaders

The program recently selected an emphasis of “Leadership and Professional Development” with the goal of having graduates influence their workplace, the profession, and public policy. The internship places interns at either Blacksburg (directed by Carol Papillon) or Northern Virginia (directed by Susan Moore) to complete the nine-month program. The upcoming class has 17 interns from 14 different universities.

Over the past five years, 95 percent of graduates have passed the national registration exam on their first attempt, and 70 percent are employed within 3 months of program completion. Alumni are encouraged to network by joining the LinkedIn group “Virginia Tech Dietetic Internship Alumni Network.”

Kelly McGrath was awarded the “2012 Recognized Young Dietitian for Virginia” based on her professional leadership. She received her B.S. and M.S. from HNFE and graduated from the internship in 2012.

Our Mission:

“...to foster community partnerships to combat obesity in the Dan River Region through healthy lifestyle initiatives.”

Left to Right: Jennie Hill, Jamie Zoellner, Bryan Price, Monica Motley, Delaware Clark, Sherri Right, Terri Corsi, and Constance Covington.
Catherine Woteki (M.S. ‘72, Ph.D. ‘75), the Outstanding Alumna for 2012, has had a distinguished career in government, academics, and industry. She served as the first undersecretary for food safety at USDA, the dean of agriculture at Iowa State, the global director of scientific affairs for Mars, Inc., and in the White House Office of Science and Technology Policy.

Catherine is now the chief scientist and undersecretary for research, education, and economics for USDA. A nutritional epidemiologist, her research interests include nutrition and food safety policy.

Heather Cox (B.S. ‘97, M.S. ‘08), received the CALS Outstanding Alumni Leadership Award for 2012 and has been a leader in establishing alumni connections. She creates strong alumni relationships by guiding current students into successful career paths through teaching and mentoring. Later, she engages them as alumni who contribute to unique experiential and classroom opportunities.

Heather was also awarded the “Distinguished Dietitian of the Year for Virginia” at the annual Virginia Dietetic Association meeting.

2011 Outstanding Achievement Awards

Recipients for HNFE and CALS awards were Nicolin Girmes-Grieco (M.S. ‘01), who was honored as Outstanding Recent Alumni; Carolyn Miles (B.S. ‘69, M.S. ‘71, Ph.D. ‘77), who received the Outstanding Alumni Award, and Carol Papillon, who was awarded the Outstanding Faculty Service Award.

Girmes-Grieco teaches undergraduate classes, serves on various committees, and advises approximately 50 students. Miles was the director of the Clinical Obesity and Nutrition Program at NIDDK. Papillon directs the dietetic internship program and teaches and advises undergraduates.

Sean Heffron (M.S. ‘03), the Outstanding Recent Alumnus for 2012, is a cardiology fellow at New York University.

He completed his residency at Massachusetts General Hospital and clinical fellowship at Harvard. His current fellowship focuses on preventative cardiology research and how obesity and metabolic syndrome affects vascular disease.

A recipient of multiple awards and fellowships, Sean uses his unique gifts and training to advance medical and scientific knowledge.

2011 Outstanding Achievement Awards

Jordon Bergloff graduated last year in Dietetics with a minor in food science and technology. While at Virginia Tech, Jordan volunteered with a women’s resource center, a children’s diabetic camp, a rehabilitation center, and a local elementary school.

“As the president of the Student Dietetics Association, a CALS Ambassador, a summer scholar, and a member of the ePortfolio Team, Jordan defined ‘outstanding senior’,” said Heather Cox.

She recently graduated from Baylor University Medical Center’s Dietetic Internship and is job hunting in the Dallas area. She said, “I’m enjoying experiencing a different part of the country after learning as much as I could from a great clinical nutrition program!”
Open-Minded Skepticism

HNFE seniors learn how to critique research and evaluate health product claims through the course Writing & Discourse.

Questioning Research, written by Jay Williams, was designed to assist students in this endeavor.

Through this text and the course, students use open-minded skepticism and effectively communicate their findings.

The book allows readers to become more thoughtful and informed researchers, clinicians, teachers, and consumers. It is available at Amazon.com.

YOU ARE WHAT YOU EAT

Or at least Josh Bostic believes so. The recent graduate of the science of food, nutrition, and exercise option said, “Obesity-related illnesses are the second leading cause of death, yet our medical system emphasizes prescription drugs. I believe that our nation’s health will worsen until we realize diet and exercise offers more than altering superficial appearance.”

This past spring he gave a plenary presentation at Harvard University’s National Collegiate Research Conference 2012. His undergraduate research (mentored by Susan Hutson) concentrated on branched chain amino acid metabolism, and how it affects various cellular processes. He is now a graduate student in the molecular track.

After he completes his master’s with the department, his next stop is attending a research-based medical school. This self-proclaimed biochemistry nerd—and oatmeal aficionado—has a career goal of becoming a research physician in oncology or endocrinology.

Josh’s passion for health and nutrition, research, and daily oatmeal, will surely prepare him to be the change he seeks.

Samantha Harden, a Ph.D. student under Paul Estabrooks, had the goal of helping pregnant women achieve a healthy weight. Excess weight gain during pregnancy can lead to a variety of issues from gestational diabetes to a longer postpartum recovery. Appropriate gains can reduce back pain and cancer risks, increase self-esteem, and lower anxiety.

Her research partnered her with Carilion’s prenatal healthcare in Roanoke. Participants met in groups to learn about healthy food and safe activity options as their pregnancy progressed. The setting provided opportunities for interaction and setting group goals, while enjoying friendly competition. Most women believe pregnancy is the time to “eat for two,” but Harden taught eating “twice as healthy.”

She found the research inspiring because participants overcame barriers to physical activity and healthy eating and left feeling confident, healthy, and proud — while gaining the appropriate weight. She hopes her study will continue to reach more women with similar outcomes.

Harden recently defended her dissertation on “Group Dynamics in Physical Activity Promotion: Theory, Research & Practice.” She is spending the next year as a post-doc with the department.
Bread, granola bars, and chicken parts!

Bill Barbeau has led the Food, Nutrition, and Wellness Tour for more than ten years as part of the Science of Food class. This year, tour stops included Maple Leaf Bakery in Roanoke, which specializes in artesian breads; McKee Foods in Stuarts Draft, which makes granola bars; and Perdue Company’s Bridgewater plant, which processes nationally sold chicken parts.

One student said, “In terms of food processing, after taking the class and learning about different production mechanisms, the tour was extremely beneficial to see food produced on a large scale. It was one of the most interesting trips I’ve ever been on, and I hope future students continue to have this opportunity.”

In past years, the group has visited other Virginia plants such as New World Pasta, Miller Milling Company, Hood Dairy, National Fruit Products, Smithfield Foods, Hershey Foods, and a shrimp processing plant in Virginia Beach.