Well-deserved honor
Anonymous gift funds endowed graduate scholarship

We are delighted to announce a new endowed graduate scholarship in honor of Professor and Associate Dean Emerita Dr. Mary Fuqua. The scholarship will be endowed for $100,000 when it is fully funded. An anonymous friend gave the Graduate Scholarship in Nutrition in honor of Dr. Fuqua’s professional career and volunteer leadership service in retirement.

Dr. Fuqua came to Purdue from Pennsylvania State University in 1963. She served as department head of Foods and Nutrition, nutrition professor, associate dean of home economics extension, and associate dean of the School of Consumer and Family Sciences, retiring in December 1987.

Dr. Fuqua is always an educator. She won many teaching awards at Purdue, including Outstanding Teacher in Home Economics (4 years), Purdue University AMOCO Undergraduate Teaching Award, Outstanding Lecturer (given by University Student Council), and the Book of Great Teachers. She co-authored a textbook, Principles of Nutrition, which was extensively used for college nutrition classes. She was very active on University committees and in student activities. Some of them included University Senate, Graduate Council, Purdue United Way (chairman), University Campus Appeals Committee, and advisor to Mortar Board, CFS Student Council, Omicron Nu, and CFS Alumni Executive Committee.

After retiring, she enrolled in Leadership Lafayette to learn more about the greater Lafayette community and community volunteering. She has received 10 community awards, including Sagamore of the Wabash, Journal and Courier George Award, Greater Lafayette Volunteer Bureau Marcile Eddy Award, and Area IV Agency on Aging and Community Programs Felise Bray Leadership Award. She co-founded the Wabash Area Lifetime Learning Association.

All who work with her have high praise for her warmth and ability:

University dean: “Dr. Fuqua has always been a standout. ... Whatever responsibility she has, she does with enthusiasm and real purpose.”

University colleague: “Students and peers respected her for her kind warmth, fantastic communication skills, keen insight, initiative for constant improvement, and genuine caring.”

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Letter from the department head

Purdue University is full of good news! Morale is higher than I have ever experienced. Under the strong leadership of President Martin Jischke, we are hiring 300 new faculty and the Discovery Park for multi-disciplinary research is being created before our eyes. Our department is in the middle of hiring four new faculty.

This is the first time we have grown in 25 years I have been at Purdue. Business at local restaurants and at the Purdue Union Hotel is booming with all the searches underway. Faculty are submitting multi-disciplinary proposals with people from all over campus. Some will utilize the facilities being built at Discovery Park. This excitement explains why we were ranked No. 1 as the best place to work among universities.

A highlight of this year was our CSREES review this fall. This was an important strategic planning opportunity for the department. With the help of our Corporate Affiliate partners, we established our signature areas:

- calcium, vitamin D, and bone,
- botanicals for age-related diseases,
- diet, energy balance, and fitness, and
- an emerging signature area, cancer prevention. Articles highlighting each signature area will be included in future newsletters.

Our review team applauded the development of signature areas and how we integrate them across all of our missions: learning, discovery, and engagement.

Our curricula, educational programs, increase in productivity and external funding, and collegiality were all given high marks. We were challenged to prioritize the use of our resources for our signature areas.

Items of note:

- Congratulations to Olivia Wood and Carol Boushey for receiving approval for our Dietetic and Coordinated Dietetic Programs for another five years.
- We have invested much effort in strengthening our graduate program. Please see the description of these activities on page 4. Consider helping us secure stable funding for graduate fellowships as you read this article.
- See page 7 for alumni access to job opportunities.
- Thanks to those who have sent me your personal good wishes for serving on the U.S. Dietary Guidelines Committee. It is an interesting time when so many are trying to eliminate a particular macronutrient or food group in our struggle to maintain weight.

Our field enjoys a prominent position in public interest and likely holds part of the solutions to complex health concerns. Our department continues to play a role in these discoveries and the training of those who will translate the messages.

Best Wishes,
Connie Weaver
Undergraduate lab gets upgrade

With deep appreciation we dedicated the Ilo Wolff Matchett Foods Laboratory on October 3, 2003, Homecoming weekend. This event was the culmination of three years of planning and even more years of need.

Stone 229, an undergraduate basic food science laboratory, was an original construction with the building in 1954 and had never been renovated. As construction and teaching needs of the facility were investigated, it became apparent that there were insufficient University funds allotted to renovate the lab with the durability of the original construction.

Though the original laminate countertops had proved very durable over almost 50 years of service, current laminates do not allow durable service in a facility of this nature. Alternative countertop materials were more expensive than the renovation budget allowed. Additionally, it became apparent student learning would be enhanced with a greater variety of equipment.

These two specific needs — better equipment and better counters — prompted us to approach Ilo Matchett for supplemental funds. Her generous gift has provided a kitchen with a variety of equipment experiences for our students and solid counters that should stay in good condition for the life of the building.

In addition to the opportunity to upgrade this laboratory to a unit that should be as durable as its predecessor, her gift provided air conditioning for this room, too! Students and faculty alike are very grateful for that!

The gift was a great match for Matchett’s own career. She served for 39 years as an administrator for the University of Chicago Medical Center Food Services and frequently participated in the college’s clinical studies as a subject as well.

The functions of this laboratory mirror her career, since the room is used to prepare students for careers in health and food supervision during the traditional school year and is used as a metabolic kitchen for human nutrition clinical research in the summer. Thank you, Ilo!

Matching challenges

Many of our alums take advantage of employer matching gifts to increase the impact of their gifts to F&N and Purdue. We want to make you aware of some University challenges for matching funds.

Bill and Mary Ann Bindley have made a deferred gift of $22.5 million to Purdue University as a matching gift for academic chairs. They have challenged Purdue to match their $22.5 million with fifteen $1.5 million gifts to establish endowed...
Graduate training has new look

The emphasis in modern graduate training is interdisciplinary and focuses on development of critical thinking and communication skills, ethics, and grantsmanship, as much as on subject matter content. Our students are trained through the Interdepartmental Nutrition Program or the Food Science Interdepartmental Graduate Program.

The faculty from several departments have worked hard to reinvent the graduate curriculum for INP. We have developed a yearlong eight-credit core course taken by all first year graduate students. This course serves as a foundation in scientific concepts relevant to nutrient metabolism and nutrient-disease interaction from a perspective that spans approaches from molecular to cell to clinical to populations. The core course unifies entering students as a class and this unity persists through the graduate student organization.

Specialized courses have been added that reflect the faculty expertise and topics of current scientific interests such as Polyphenolics in Health, Macronutrients, Nutrition and Genetics, and Nutrition and Genomics. Graduate students are required to take a course in ethics, a course in grantsmanship, communication techniques, as well as supporting courses in statistics and sciences.

Interdisciplinary graduate programs compete for first year support from the Graduate School. We aspire to have some permanent funding for graduate fellowships. We ask you to consider supporting our graduate program in this way. Details are given in the box below.

We are so proud of our graduate students. They are competitive for local and national recognition including best paper competitions at the American Society for Nutritional Sciences, American Society for Clinical Nutrition, the Institute of Food Technology, and the Society for Ingestive Behavior.

They also help shape the department by communicating through an elected liaison at faculty meetings.

Graduate endowments make a difference

Our faculty is dedicated to training the next generation of leaders in nutrition research and education. But there is a need to improve graduate support to assist in recruiting the brightest and best students.

To ensure continued growth and strength for the department, our review team last fall recommended that we increase external graduate funding. (See Connie Weaver’s letter on page 2 for more information.) Increased graduate fellowship funding would make it easier for our department to attract excellent students through competitive stipends.

Why is endowed funding for graduate students important?

■ Recruitment of top-notch graduate students to be mentored by outstanding faculty will assure our department’s continued impact on health and wellness in the nation and the world.

■ Increased funding of graduate fellowships will increase our ability to bring these students to Purdue.

■ Interdisciplinary graduate programs must compete for first-year support from the Graduate School. The department is seeking permanent funding for subsequent year graduate fellowships.

Endowed graduate fellowships extend the impact of a Purdue graduate degree and support the next generation of nutrition researchers. With your support, the vital contribution of graduate students to the department’s research efforts will be assured.

Endowment questions and answers

**What is an endowment?** A gift that is held in perpetuity and invested in a manner that protects the principal from inflation. The investment income provides a stable funding source for such purposes as scholarships, fellowships, or professorships.

**What are the benefits?** They offer many benefits to the University and to donors. Endowments increase Purdue’s institutional autonomy and provide it with the resources it needs to stay at the cutting edge. Endowment donors have the opportunity to have a lasting influence on the University’s character and to honor or memorialize loved ones, friends, colleagues, teachers, or other individuals. Named graduate fellowships require a minimum $1 million endowment or $40,000 annually.
Pioneer: a tribute to Helen Clark

Since this newsletter is emphasizing the Foods and Nutrition graduate program, it is the perfect timing for an expanded remembrance of Helen Clark (1912-2001), the original pioneering force behind our strong graduate program.

When Dr. Clark joined the faculty in the Department of Foods and Nutrition in 1954, very little research was being conducted in the department and course offerings in nutrition at the graduate level were extremely limited. She initiated the development of graduate level nutrition courses and a research program involving graduate students.

She was a pioneer in many other areas also. She did pioneering research in proteins and amino acids; she participated in nutritional policy firsts at national and international levels; and she broke ground for the status of women in science and at Purdue. She has a long string of “firsts” to her credit. For example, she participated in the first White House Conference on Food, Nutrition, and Health in 1969. She served as chair for local professional involvement in this effort in the state of Indiana.

The impact she made as a researcher is great. Her pioneering work in protein metabolism and amino acids is still being referenced by researchers today. Her work on the adult requirements for lysine has been widely used by national and international policy makers to formulate changes for improved nutrition that impact world food problems.

She was recognized for her outstanding leadership and service to the University with the Helen B. Schleman Gold Medallion Award and the Women’s Caucus (Purdue University) Award.

Dr. Clark never lost sight of the cost for a woman in the 1950s, 60s, and 70s to excel in science. She demanded that her women students attain and keep higher standards than their male counterparts. She knew that they would never be recognized with parity. To achieve success, they had to be better. She was the first woman to become a distinguished professor in the history of Purdue.

In addition to the respect due her own research, Dr. Clark deserves recognition for the initial building of an excellent teaching and research program in nutrition at Purdue University. She leaves a legacy through her pioneering leadership.

How can we say ‘thank you’?

“A passion for her work,” excellent teaching, creative course development, warmth, and a genuine interest in students are all things that describe the teaching career of Karen Jamesen, B.S. ’62, M.S. ’66, who retired May 2004.

She joined Foods and Nutrition as an instructor in 1966, upon completion of her master’s degree in this department, and was invited to become part of the faculty in 1970. She taught tirelessly in the Department of Foods and Nutrition for 38 years.

She received numerous teaching awards, including the Amoco Teaching Award, Mary L. Matthews Teaching Award, Phi Tau Sigma Award, and Gamma Sigma Delta Award of Merit, and was placed on the permanent list of Outstanding Teachers in CFS.

Students appreciated her clarity, knowledge of course content, interesting presentation of material, and accessibility for help.

She was inducted into the University’s Teaching Academy in 1997 and her name was put on the Book of Great Teachers in 1999. She is also a Distinguished Alumna of the School of Consumer and Family Sciences.

Jamesen has been a creative thinker for the department and for students. She developed the Communication in Foods and Nutrition class, F&N 424, a notoriously challenging capstone class in which students create presentations and hone presentation skills. (Many alums will remember her outstanding introductory session for this class in which she portrays how NOT to give a food demonstration!)

She promoted food science teaching in the high schools of Indiana by training high school teachers in food science summer workshops. She also chaired the committee to develop the Nutrition, Fitness, and Health major.

Active in promoting the programs and students of this department, she secured internship placement for students in major food companies.

She also innovated an externship experience for our students during Christmas vacation or spring break. The response from industry has been so favorable that some years we had more placements than we had students to fill them.

Letters from former students have come into the office, as news of Jamesen’s retirement has trickled out. Many wanted to tell her the impact she had on their lives. At the CFS 75th anniversary a few years ago, this was also evident. Jamesen was mentioned as one who had career-shaping influence on many alums.

Karen, you will be sorely missed. We will miss your insight, your depth of knowledge, your historical perspective, your honest thoughts even when contrary to prevailing opinion, your wit and laughter, your genuine caring, and the sound of your voice in the hallway.

But the impact of your career goes on. It reaches out into the lives of 38 years of students who have careers and families that feel the impact of one passionate teacher, full of knowledge, wisdom, and caring.

Thank you for all you have given to Foods and Nutrition and to students. We wish you fun and passion in your retirement, but we don’t know how we will do without you.

Karen Jamesen’s Purdue memories

We have had numerous questions whether it was too late to send in a letter in honor of Karen’s retirement. We always say, “No, it is not too late.”

Though the memory books have already been given to her, we added blank pages for extra letters to be included.

So, if you intended to write a letter and thought you missed the deadline, you are welcome to send it anyway. It can be added to her book at any time in the future. Send it to: Karen Jamesen, 712 Sugar Hill Drive, West Lafayette, IN 47906. Or bring it with you when you attend Homecoming!

Matching gifts, cont.

The gifts must be not be deferred and may be pledged over a 10-year period.

The Bindleys also have made a deferred gift of $11.5 million to match endowed scholarships in life sciences. Scholarship gifts to F&N qualify for this match.

Gifts may not be deferred and may be pledged over a five-year period; the minimum matching dollar amount is $20,000.
Funded projects listed by professor

Carol J. Boushey
- Calibration and Validation of a Semiquantitative Food Frequency Among Adults
- Improving Bone Health in Adolescence through Targeted Behavioral Intervention
- Parent and Household Influences on Calcium Intake among Preadolescents
- Safe Food for the Hungry 2003/2005

John R. Burgess
- 21st Century Fund — In Vivo Antioxidant Activity of Phytochemicals in Foods
- Effect of Flavonoids on Coenzyme Q Metabolism and Function
- Effect of Grapefruit Consumption on Disease Risk
- Nutritional Factors in ADHD
- Role of LC-PUFA Metabolism in ADHD

Wayne W. Campbell
- Aging, Physical Activity, and Toll-Like Receptor-4
- Chromium Picolinate/CLA Research
- Dietary Protein Intake and Muscle Gene Expression
- Dietary Protein Requirements of Elderly Men and Women
- Do Elderly Women Have a Higher Protein Requirement than Young Women?
- Experimental and Applied Sciences Ph.D. Candidate Support
- Effect of Dietary Beef on Weight Loss-Induced Changes in Immune Function, Indicators of Zinc and Iron Status, and Body Composition in Older Women
- Egg Protein Intake, Resisitive Exercise Training, and Muscle Size in Older Men and Women
- Pinitol Supplementation in Humans: Effects on Blood and Urine Inositol Concentrations and Whole Body and Muscle Glucose Metabolism

James R. Daniel
- Alternative Sweeteners, Fat Mimetics, Anti-Staling Agents, and Novel Food Gums

William D. Evers
- Can Computer-Assisted Instruction Enhance Communication Skills of Nutrition Professionals Who Educate Consumers about Healthy Food Choices?
- Raising Awareness about Nutrition and Health Issues by Increasing Critical Thinking Skills Using Computer-Assisted Instruction

James C. Fleet
- Calcium Absorption in Caco-2 Cells: Molecular Mechanism
- Diet, Vitamin D Status, and Prostate Cancer Prevention
- Dietary Protein and Muscle Gene Expression
- Genistein and Vitamin D Synergism on Prostate Cells
- Intestinal Calcium Absorption: Molecular Mechanisms

Young-Cheul Kim
- Role of Stearoyl-CoA Desaturase Gene Expression in Adipocyte Biology
- Soy Isoflavones and Fat Cell Gene Regulation

April C. Mason
- Family Nutrition Program
- Food Irradiation Education
- Food Safety Education for Delivered Meals Programs

Richard D. Mattes
- Appetitive Effects of the Macronutrients in Fluids and Solid Foods
- Effects of a Novel Viscosity System on Appetite
- Effects of Almonds on Appetite and Energy Balance
- Effects of Glycemic Index and Variety on Appetite and Energy Balance in Humans
- The Energetics of Peanut Consumption
- Fat Taste, Preference, and Intake; and Readiness for Dietary Modification among PROP Taster Groups
- Food Intake on Manual Dexterity
- Health Effects of Almond Consumption
- Hedonics and Dietary Intake of Fat
- Oral Fat Exposure and Lipid Metabolism in Humans
- PROP Taster Status and Resistance to Oxidative Stress in Humans
- Psychophysical Assessment of Fat Taste Perception
- Range Bias and the General Labeled Magnitude Scale
- Satiation Evaluation of Gum Texture and Flavor
- Touch Sensitivity on the Tongue

Dorothy M. Morré
- Apoptotic Response of LNCaP Cells to Phenoxodiol in Co-Culture with Osteoblasts Compared to Monoculture
- Application of Novel Multiphase Separations
- Biochemical Research Applications of Novel Multiphase Separators
- Cancer and Polyphenols
- Comparative Text Study: Effects of Various Concentrates of Natural Extracts on Cancer Cells Using T-NOX Protein Target
- Evaluation of Phenoxodiol Therapy
- Grape Extract and Cancer
- Mammalian Cellular Response
- Pet Food Shelf Life and Stability
- Polyphenol Synergies in Cancer Prevention and Treatment
- The Protective Effect of Standardized Grape Preparation Against Cancer
- Research in Vitamin A and Cancer

Charles R. Santerre
- Assessment of Contaminant Levels in Fish
- Educating Professionals about Food Biotechnology
- Ergogenic Supplement Usage by Adolescent Athletes
- Influence of Preparation on Contaminant Residues
- Protecting Sensitive Populations from Contaminants in Fish
- Rapid Methods for Contaminants in Fish and Fish Oil

Dennis A. Savaiano
- Improving Bone Health in Adolescence through Targeted Behavioral Intervention
- Reversing Milk Aversion
- Soy Oligosaccharides and Intestinal Health — a New Project in Process with Central Soya

Jon A. Story
- Dietary Fiber/Cholesterol Metabolism
- Soy Polysaccharides/Bile Acid Metabolism
- Soybeans, Bile Acids, Microflora, and Intestinal Health

Dorothy Teegarden
- Calcium, Dairy, and Body Fat in Adolescents
- Effect of Dietary Calcium Education Intervention on Body Fat Mass in Adolescents
- Improving Bone Health in Adolescence through Targeted Behavioral Intervention
- Role of Dairy Products in Weight Loss: a Multi-Center Trial
- Role of Ceramide Metabolism in Cellular Resistance to Apoptosis

Donna J. Vandergraaff
- Exploring the Food Pyramid with Professor Popcorn
- Folic Acid Education — Indiana Folic Acid Council
- Have a Healthy Baby — Allen and St. Joseph Counties
- Have a Healthy Baby Video Lessons for Physician’s Offices — English
- Have a Healthy Baby Video Lessons for Physician’s Offices — Spanish

Connie M. Weaver
- Bioavailability of Calcium and Absorption Enhancers
- Botanicals Center for Age-Related Diseases
- Calcium, Dairy, and Body Fat in Adolescents
- Calcium and Exercise Interactions on Bone
- Calcium Metabolism in Adolescents
- Effect of Functional Ingredients on Calcium Absorption and Bone
- Effect of Microgravity on Bone Resorption
- Metabolism of Plant Bioactives

Jobs online
Alums: Interested in a career change? Our new online jobsite at career.cfs.purdue.edu/fn will be accessible August 20, 2004.
If you post a job-seeker profile, you will be sent an e-mail whenever a job is posted that matches your criteria. You can also update your alumni information from this Web site.
High-tech biomarkers

When the Institute of Medicine began revising nutrient requirements that became the Dietary Recommended Intakes, a new strategy was embraced — to determine nutrient recommendations for optimizing health and reducing risk for chronic diseases.

Formerly, nutrient requirements were set to prevent deficiencies, replace losses, and provide needs for growth. Relevant studies for setting requirements were those that determined intakes which produced deficiency symptoms, saturated tissues, or led to nutrient balance.

Outcome measures shifted to optimizing retention or minimizing biomarkers for risk of disease, beginning with bone related nutrients on the panel which set the requirements in 1997. (Connie Weaver was a member of the panel.) It became apparent for many nutrients that appropriate biomarkers are not yet available. Biomarkers are badly needed for research because it takes too long for development of chronic disease.

In response to this need, Purdue faculty are developing new approaches to determine biomarkers for disease risk which can be used to determine nutrient requirements of the future.

- A new USDA grant allows Wayne Campbell, with expertise in clinical studies determining protein requirements, to team up with Jim Fleet, who has skills in molecular biology. They will search for changes in genes which regulate protein synthesis in response to protein intake to determine protein requirements by this functional test.

- 41 Ca technology is being developed at Purdue as a marker to rapidly determine bone resorption. Purdue has one of two Accelerater Mass Spectrometers in the U.S. which can measure this rare isotope. Weaver and her team are studying the influence of phytoestrogens on bone resorption in postmenopausal women as part of the Botanicals Center for Age Related Diseases. In the future, she and Fleet hope to use this approach to determine Vitamin D requirements and other dietary effects on bone.