

# What's Happening

•August 27, 2004•

Department of Nutritional Sciences  
College of Agriculture and Natural Resources  
University of Connecticut

*From the desk of Sung I. Koo, Professor and Head, Department of Nutritional Sciences -*

Greetings, colleagues, alumni, and friends.

This has been another successful record-breaking year for the Department of Nutritional Sciences (NUSC). At the outset, I would like to thank our faculty, staff, alumni, and friends for their continued commitment to excellence and contributions to the success of our programs.

As the USDA external review team reports, the Department continues to be a strong productive academic unit with balanced and integrated programs in teaching, research, and outreach/extension. It serves well the people of Connecticut and the region through successful outreach/extension programming, successfully fulfilling its tripartite mission of the Department. Undoubtedly, one of the key reasons for the Department's success lies in the faculty's unabated commitment to excellence in teaching, research, and outreach/extension. During the 2003-04 academic year, our graduate program enrolled a record high number of students (57) and 6 M.S. and 5 Ph.D. degrees were conferred. In addition, our undergraduate enrollment rose to 93, twice the number in 2002. NUSC faculty also generated the highest number of student credit (3,547) hours in the College, and supervised a high percentage of students in independent studies, research, and service learning courses; and contributed significantly to the University's general education program. The faculty also continue to develop and use innovative teaching technologies; Dr. Clark and his colleagues have been awarded a Provost's General Education Course Development Grant, which is to develop new content and modes of instruction for promoting critical thinking and introducing new technology in NUSC 165. This will allow the large lecture class to become more interactive.

The Department's outreach/extension programs such as the Hartford anemia project and Husky READS program, directed by Ann Ferris, contributed significantly to our instructional programs by integrating outreach/extension and research with teaching. Outreach activities also have made significant impact on international communities. Dr. Perez-Escamilla guided a national effort in Brazil to adapt and validate a household food security assessment module. He also led a national effort in El Salvador to strengthen the UNICEF/WHO Baby Friendly Hospital Initiative, and advised Ecuador government on the safe and proper establishment of a national human milk bank network. In addition, he was invited by University of Ghana as senior extension advisor to improve infant and child feeding practices in HIV affected communities and taught the 'Nutrition during Humanitarian Emergencies' online course in partnership with UConn's College of Continuing Studies. His international extension/outreach and scholarly activities were supported by the US Agency for International Development (USAID), Danish Agency for International Development (DANIDA), National Institutes

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## New Faces in NUSC

**Steven R. Davis** will be part of the Nutritional Sciences faculty this semester as an Assistant Professor. Read more details about Dr. Davis in the Faculty Spotlight on page 8 of this newsletter.

During this academic year, **Hae Rang Chung**, Ph.D., will be a visiting scholar in our Department conducting food and nutrition policy research with Dr. Rafael Pérez-Escamilla. She is the Head Researcher at the Quality Evaluation Center for the Korea Health Industry Development Institute. We are indeed very lucky to have someone of the stature of Dr. Chung working in our department.

**Susan Furbish** joined the Food Stamp Nutrition Education (FSNE) team this summer to work on the website. Susan worked in the banking industry for several years.

**Jessica Maglison** is working with Michelle Pierce as a Nutrition Educator for FSNE.

**E**ight new graduate students will begin their graduate studies this Fall semester:

**Joan D'Sousa** will work with Dr. Hedley Freake. Joan is originally from India, but most recently attended the University of Cincinnati where she worked with Dr. Sarah Couch (Ph.D. 1996) on a clinical nutrition research project.

**Dina Fakhrawi** has been working at Loma Linda University in California with Dr. Cordero-MacIntyre on nutritional assessment and clinical nutrition courses. Dina is originally from the Middle Eastern country of Bahrain. She will work with Dr. Fernandez.

**RoseAnna Holliday** will join Dr. Ferris' research group. Roseanna attended College of Southern Idaho for her baccalaureate degree, and University of Minnesota where she earned a Master's in Public Health. RoseAnna lived in Kansas City before moving to Connecticut. She has two young boys, and the oldest is starting first grade this fall.

**Min-Ji Hong** arrived from Korea, where she earned a B.S. and M.S. in Food and Nutrition from Kyung-Hee University in Seoul. She spent a year in England during her undergraduate experience, and her graduate work focused on the physical and nutritional status of Korean school children and families. After obtaining her M.S., she was employed at the Korea Health Industry Development Institute where

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## Research and Publications

**NEW GRANTS AWARDED:** Koo, SI. Hypcholesterolemia action of green tea extracts, NIH, NCCAM, 04/01/04-03/31/06, \$369,792.

### PROPOSALS SUBMITTED:

Lammi-Keefe CJ., Co-PI S. Kajuna, Nutritional status of pregnant Tanzanian women: An assessment of fatty acids critical to infant growth. USDA FAS, 07/01/04-06/30/07, \$12,772.

Lammi-Keefe CJ., Beck C., Makriyannis A. Post-partum depression: Impact of DHA on incidence and severity of symptoms and association with endocannabinoids. USDA NRI, 07/01/04-06/30/07, \$498,107.

Rodriguez, NR. Effects of exercise on protein utilization in healthy children. USDA, 08/01/04-07/31/06, \$206,927

Rodriguez, NR. Benefits of nutritional supplementation during prolonged exercise to skeletal muscle protein utilization and mental performance in energy deprived men and women. Department of Defense, US Army Peer Reviewed Medical Research Program 10/01/04-09/30/07, \$919,593.

Rodriguez, NR. Co-PI, Pescatello, L. PI. Immediate effects of aerobic exercise on blood pressure control. Donaghue Foundation. \$550,000.

Rodriguez, NR. The role of dairy calcium as a nutrient partitioning agent: Interactions between fatty acid metabolism and protein turnover. \$85,000. January 2005 – December 2005. N. Rodriguez and Lisa Vislocky. Letter of Intent submitted to Dairy Management Inc., May 2004. (Not accepted)

**BOOK CHAPTERS:** Furr, H.C., and R.M. Clark. 2004. Transport, Uptake and Tissue Storage of Carotenoids: In Carotenoids in Health and Disease (editors Norman Krinsky and Susan Mayne) In Press.

Freake HC. Zinc: Physiology. In Encyclopedia of Human Nutrition, Caballero B, Allen L and Prentice A (eds). 2nd ed, Elsevier, Oxford, UK. In press.

Freake HC and Berdanier C. Nutrient Gene interactions: Molecular Aspects. In Encyclopedia of Human Nutrition, Caballero B, Allen L and Prentice A (eds). 2nd ed, Elsevier, Oxford, UK. In press.

Bernadier C and Freake HC. Nutrient Gene interactions: Health Implications. In Encyclopedia of Human Nutrition, Caballero B, Allen L and Prentice A (eds). 2nd ed, Elsevier, Oxford, UK. In press.

Carbohydrate Metabolism – Synthesis and Oxidation, McGrane, M.M. In Biochemical, Physiological, & Molecular Aspects of Human Nutrition, 2nd Edition M. Stipanuk, Editor Elsevier

Carbohydrates McGrane, M.M. and Hassid, W.Z. In McGraw-Hill Encyclopedia of Science and Technology McGraw Hill, Inc.

Pérez-Escamilla, R. Guerrero-Almeida, L. Breastfeeding epidemiology: Current advances and multidisciplinary applications. In: 'Protecting Infants through Human Milk: Advancing the Scientific Evidence Base' Eds. Pickering, LK, Morrow, AL, Schanler, RJ, Ruiz-Palacios, GM. Recent Advances in Experimental Biology and Medicine, Kluwer Publishers (In Press).

**ARTICLES SUBMITTED:** Scribner, K.B., Odom, D.P. and McGrane, M.M. (2004) In vivo mechanism of Retinoid Regulation of Phosphoenolpyruvate Carboxykinase Gene Expression in Liver *J. Biol. Chem.* Submitted.

Reddy, G., Odom, D.P., Scribner, K.B. and McGrane, M.M. (2004)

Vitamin A Deficiency: Differential Gene Expression and Metabolic Outcome. *J. Lipid Res.* Submitted.

**ARTICLES ACCEPTED:** Ballesteros MN, Cabrera RM, Saucedo MS & Fernandez ML. 2004. Dietary cholesterol does not increase biomarkers for chronic disease in a pediatric population at risk from Northern Mexico. *Am. J. Clin. Nutr.* (in press).

Fernandez ML, Metghalchi S, Vega-López S, Conde-Knape K, Lohman TG & Cordero-MacIntyre Z. 2004. Beneficial effects of weight loss on plasma apolipoproteins in postmenopausal women. *J. Nutr. Biochem.* (in press).

Loosemore, ED, Judge, MP and Lammi-Keefe, CJ. Dietary intake of Essential and long-chain polyunsaturated fatty acids in pregnancy. *Lipids*, in press.

Lammi-Keefe, CJ. Biochemical indicators of nutritional status as predictors of chronic disease in the elderly. *Topics in Clin Nutr*, in press.

Contois, JH, Lammi-Keefe, CJ, Vogel, S, McNamara, JR, Tucker, K, Wilson, PWF and Schaefer, EJ. Diet and plasma lipoproteins in elderly with and without cardiovascular disease. *Topics in Clin Nutr*, in press.

Himmelgreen DA, Perez-Escamilla R, Martinez D, Bretnall A, Eells B, Peng Y, Bermúdez Angela. The Longer You Stay, the Bigger You Get: Acculturation and Obesity in Inner City Latino Adults *Am J Physical Anthropology* (In Press)

Chapman DJ, Damio G, Young, S, Pérez-Escamilla, R. Effectiveness of breastfeeding peer counseling in a low-income, predominantly Latina population: A randomized controlled trial. *Archives Pediatric Adolescent Medicine* (In Press)

Pérez-Escamilla R, Segall-Corrêa AM, Kurdian Maranhã L, Archanjo Sampaio MF, Marín-León L, Panigassi G. An adapted version of the USDA food insecurity module is a valid tool for assessing household food insecurity in Campinas, Brazil. *J Nutr* (Accepted)

**ARTICLES PUBLISHED:** West KL & Fernandez ML. 2003. Advantages of using guinea pigs to study the mechanisms of hypocholesterolemia associated with drug therapy. *Cardiovascular Reviews.* 22:7-22.

Cordero-MacIntyre Z, Metghalchi S, Rosen J, Warrens P, Lohman T & Fernandez ML. 2004. Impact of weight loss on plasma leptin in obese postmenopausal women treated with phentermine hydrochloride. *J. Applied Research* 4:60-67.

Lofgren IE, Herron KL, Zern TL, West KL, Patalay M, Shachter NS, Owen K, Koo SI & Fernandez ML. 2004. Waist circumference is a better predictor than body mass index of coronary heart disease risk in overweight premenopausal women *J. Nutr.* 134:1071-1076.

Herron KL, Lofgren IE, Sharma M, Volek JS & Fernandez ML. 2003. A high intake of dietary cholesterol does not result in more atherogenic LDL particles in men and women independent of response classification. *Metabolism* 53:823-830.

Moon YK and Freake HC. Nutritional and hormonal regulation of lipogenesis in rat white and brown adipocytes. *J Nutr Sci Vitaminol.* 49, 40-46, 2003.

Woodworth, J.C., Minton, J.E., Tokach, M.D., Nelssen, J.L., Goodband, R.D., Dritz, S.S., Koo, S.I. and Owen K.Q. Dietary L-carnitine increases plasma leptin concentrations of gestating sows fed one meal per day. *Domestic Anim. Endocrinol.* 26: 1-9, 2004.

Pérez-Escamilla, R. Breastfeeding and the nutrition transition in

the Latin American and Caribbean region: A success story? Reports in *Public Health/Cadernos de Saúde Pública* (Brazil) 2003;19:S119-S127

Saila-Ngita D, Bravo-Ureta B, Perez-Escamilla R. Fertility Desires and Sample Selection bias: The case of Senegal. *J Asian African Studies* 2003;38:1-16

Parás P, Pérez-Escamilla R. El rostro de la pobreza: La inseguridad Alimentaria en el Distrito Federal (The face of poverty: Food insecurity in Mexico City). *Revista Este País* (Mexico) 2004;158:45-50.

Sciaudone MP, Yao L., Schaller M., Zinn SA., Freake HC. Diethyl ylenetriaminepentacetic acid enhances thyroid hormone action by a transcriptional mechanism. *Biological Trace Element Research* Vol. 99, 2004: 219-231.

E.L. Shanley, MBA, RD, CD-N<sup>1</sup>; C.A. Thompson, MS, RD1; L.A. Leuchner, MS1; Y. Zhao, PhD2, <sup>1</sup>Univ. of Conn., Dept. of Nutritional Sciences, Storrs, CT, <sup>2</sup>Oregon State University, Dept. of Fd. Sci. & Technology, Corvallis, OR. "Distance Education Is As Effective As Traditional Education When Teaching Food Safety, *Food Service Technology*, 2004: (4); 1-8.

#### CONFERENCE PROCEEDINGS (Abstracts or Posters):

Anderson A.K., Damio G., Young S., Chapman D., Pérez-Escamilla R. Impact Of Peer Counseling On Exclusive Breastfeeding Among Low-income, Inner-city USA Women: A Randomized Controlled Trial. International Society on Human Milk Research and Lactation Conference, Cambridge, England 09/10/04-09/14/04.

Arsenault MA, MacLeod E, Weinstein J, Phillips V, Ferris AM, Duffy V. Reported history of Otitis Media (OM) in children associates with intake of vegetables and sweets. Proc. International Confederation of Diet. Assoc. 5/2004

Chapman D., Damio G., Pérez-Escamilla R. Economic Analysis of the Costs and Savings Associated with Providing Breastfeeding Peer Counseling asa Standard WIC Service. International Society on Human Milk Research and Lactation Conference, Cambridge, England 09/10/04-09/14/04.

Judge M.P., De Mare C.I., Keplinger M.R., Mutungi G., Courville A.C., Sink K.S., Thoman E.B., Lammi-Keefe C.J. Infant Sleep Patterns in the First Two Postnatal Days Associate with Temperament Characteristics at 6 Months: Evidence for Developmental Continuity. International Society on Human Milk Research and Lactation Conference, Cambridge, England 09/10/04-09/14/04.

Porto M, Lim NC, Yao L, Freake HC, Bruckner C. Biological Evaluation of Zinc-selective Chemosensors in Live Cells, Poster Presentation, Frontiers in Undergraduate Research in the Arts, Sciences and Humanities (FURASH 2004), University of Connecticut, Storrs, CT, U.S.A., April 16-17, 2004. Also presented at the R.T. Major Lecture Series, Department of Chemistry, University of Connecticut, Storrs, CT, April 22, 2004.

G. Reddy, D.P. Odom, K.L. West, M.L. Fernandez and McGrane, M.M. Differential Gene Expression Associated with Vitamin A Deficiency and the Metabolic Outcome of Disrupted Lipid and Carbohydrate Metabolism FASEB J 5357.

Singh, R, Jones, E, Loosemore, E, Lammi-Keefe, CJ and Belury, M. 2004. Plasma leptin and adiponectin levels with and without gestational diabetes mellitus. FASEB J., LB

Pérez-Escamilla R. The Connecticut Family Nutrition Program for Infants, Toddlers, and Children: Why research and evaluation matter. National Food Stamp Nutrition Education Conference, Columbus, Ohio, March 16, 2004 (Conference Program, page 5).

W.F. Martin, M.A. Pikosky, P.C. Gaine, J.B. Mettel, N.R. Descher,

R.R. Wolfe and N.R. Rodriguez. Measurement of Whole Body Proteolysis in Response to Exercise Training: Different Tracers, Different Responses. FASEB Conference, Washington, D.C., 2004.

J.B. Mettel, K.L. West, I.E. Lofgren, M-L. Fernandez, S.I. Koo and N.R. Rodriguez. Effects of a weight loss intervention on substrate oxidation in premenopausal women. FASEB Conference, Washington, D.C., 2004.

J. Sloat, A. Pontello-Pescatello, D. Cooper, N. Rodriguez. Protein turnover in female water polo players. FASEB J 18: 2004.

**Patents:** Koo, S.I., Hua, D., and Noh, S.K. Compounds Affecting Cholesterol Absorption. U.S. Patent Number 6,727,277. (Issued April 27, 2004), U.S. Patent and Trademark Office.

**INVITED TALKS:** Ferris AM. 12/4/03. Center for Health/HIV Prevention, University of CT. Chasing Anemia: The Hartford Anemia Project.

Ferris AM. 2/13/04. Purdue University, Department of Food Science and Nutrition, Invited Seminar. Chasing Anemia: The Hartford Anemia Project.

Ferris AM. 2/16/04 UCHC, Department of Community Medicine and Health Care. Chasing Anemia: The Hartford Anemia Project.

Ferris AM. 3/23/04, University of Texas- Austin. College of Natural Sciences. Invited Seminar. Chasing Anemia: The Hartford Anemia Project.

Lammi-Keefe, C. 09/03. University of Connecticut, Department of Psychology. Fish in the Pregnant Woman's Diet: Smarter Infants?

Lammi-Keefe, C. 01/29/04 Hartford Hospital. OB-GYN Faculty Meeting. DHA-Functional Food During Pregnancy and Infant Functional Outcomes.

Lammi-Keefe, C. 04/02/04 CANR Graduate Research Form. Does Fish for Dinner = Brainier Kids?

Lammi-Keefe, C. 05/05/04, University of Cincinnati, Department of Nutrition. Does the Mother's Dinner Impact Brain Development of Her Infant?

McGrane, M. 05/13/04, Bioscience Complex Seminar Series, University of Connecticut, "Vitamin A Regulation of Gene Expression in Liver: From a Single Gene to a Multi Gene Profile."

McGrane, M. 04/15/04, Department of Pharmaceutical Sciences, "Vitamin A Regulation of Gene Expression in Liver.

Pérez-Escamilla R., 01/13/04, Diabetes among Latinas: Findings and recommended actions, Diabetes Call to Action Task Force, Hartford, CT, January 13, 2004

Pérez-Escamilla R., 02/17-19/04 Validity of the USDA scale for assessing household food insecurity in Brazil. "Second Household Food Insecurity Assessment National Expert Panel Meeting", University of Campinas, Brazil.

Pérez-Escamilla R., 03/16/04, The Connecticut Family Nutrition Program for Infants, Toddlers, and Children: Why research and evaluation matter. Food Stamp Nutrition Education national meeting, Columbus, Ohio, March 16, 2004.

Pérez-Escamilla R., 06/19-23/04, Methods for assessing household food insecurity in Latin America. VI Congresso Brasileiro de Epidemiologia (VIth Brazilian Congress of Epidemiology). Recife, Brazil.

Rodriguez NR. Consequences of Alcohol Consumption to Athletic

## Graduate Students Completed

### Master's Thesis defenses:

**Gautam Reddy Bhimidi, M.B.B.S.**, "Differential gene expression associated with vitamin A deficiency and the metabolic outcome of disrupted lipid and carbohydrate metabolism." May 6, 2004 *Major Advisor: Mary M. McGrane.*

**Jolene C. Sloat**, "Protein Turnover in Female Adolescent Water Polo Players," July 20, 2004, *Major Advisor: Nancy Rodriguez*

**Meredith Poehlitz**, "Exploring Student Outcomes from a Service-Learning Experience in Community Nutrition Using Qualitative Methods," July 22, 2004, *Major Advisor: Ann Ferris*

**Valery M. Phillips**, "Dietary intakes, iron consumption, and estimated iron bioavailability in low-income, 2-5 year old children residing in Hartford, CT," August 31, 2004, *Major Advisor: Ann Ferris*

### Ph.D. Prospectus defense:

**P. Courtney Gain, R.D.**, "Effects of endurance exercise on intracellular signaling and skeletal muscle turnover in female runners" June 21, 2004 *Major Advisor: Nancy Rodriguez.*

### Ph.D. Dissertation defenses:

**Bridget A Chinebuah-Aidam** "Impact of lactation counseling on exclusive breastfeeding in Ghana: A randomized controlled trial." April 27, 2004 *Major Advisor: Rafael Pérez-Escamilla*

**Kristin L. Herron, M.S.** The individual response to a diet high in cholesterol provided by eggs: Does response affect coronary heart disease risk? April 9, 2004 *Major Advisor: Maria Luz Fernandez*

**Ingrid Lofgren M.P.H.** "The Impact of a Weight Loss Program on Risk Factor Assessment for Obesity, Coronary Heart Disease, and Diabetes Mellitus Type 2". July 28, 2004 *Major Advisor: Maria Luz Fernandez*

**Elizabeth G. Loosemore, M.B.A., M.S., R.D.** "Pregnancy complicated with GDM: Long chain polyunsaturated fatty acids and infant neurodevelopment." June 10, 2004 *Major Advisor: Carol Lammi-Keefe*

**Kelly B. Scribner, M.S.** "In vivo mechanism of retinoid regulation of phosphoenolpyruvate carboxykinase gene expression in liver." April 13, 2004 *Major Advisor: Mary M. McGrane*

**Kristy L. West, M.S.** SC-435, an ileal apical sodium co-dependent bile acid transporter (ASBT) inhibitor: Hypocholesterolemic mechanisms of action in the guinea pig. March 26, 2004 *Major Advisor: Maria Luz Fernandez*

### New Faces in NUSC..continued from page 1

she worked on a large data set from a national survey of dietary intake, as well as nutritional management for the elderly, looking particularly at the use of home delivered meals. Ms. Hong will work with Dr. Pérez-Escamilla.

**Katie Jeffrey** will also join Dr. Rodriguez' research group. Katie earned her B.A. in Sociology and Anthropology from Fairfield University in 2001. Since then she has worked as an administrative assistant at Pfizer Global Research and Development through Pro-Fitness/Health Solutions in their corporate health and fitness center in Groton, CT.

**Liz McArthur** will return to the Department as a graduate student with Dr. Carol Lammi-Keefe. Liz left here with her B.S. degree in 2003, and completed her dietetic internship at Yale New Haven Hospital in August. She is looking forward to getting involved with the NAPS project.

**Moises Torres-Gonzalez** is here from Mexico to work with Dr. Fernandez. He earned a M.S. in Biochemistry in 2002 from Instituto Tecnológico de Veracruz, and a B.S. in Biochemistry from Instituto Tecnológico de Colima in 1999. His research interest is insulin resistance and cardiovascular disease.

**David Waters** is already a familiar face to the Department as he has been working with Dr. Clark over the past year developing HPLC and GC methods for his undergraduate senior honors research thesis. He earned his B.S. in Nutritional Sciences in May, and is continuing his scholarly activities in pursuit of a master's degree with Dr. Clark.

### Dietetic Internship Placements 2004

Katelyn Ariagno	New York Presbyterian Hospital
Marissa Ciorciara	University of Medicine & Dentistry of New Jersey
Laurie Danca	Loyola University
Lindsay Friedman	Vanderbilt University Medical Center
Candace Jones	University of Connecticut, Allied Health
Geralyn LaVecchia	North Shore-Long Island Jewish Health System
Nicole Moretti	St. Joseph College
Valery Phillips	National Institutes of Health
Melissa Rifkin	New York Presbyterian Hospital
Meredith Ryan	East Carolina University
Demetra Timmons	St. Joseph College
Jolene Sloat	New York Presbyterian Hospital
Kathy Walsh	University of Connecticut, Allied Health
Elizabeth Wojdyla	St. Joseph College

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Performance – Student Athlete Advisory Council – November 16, 2003

Rodriguez NR. Consequences of Alcohol Consumption to Athletic Performance – University of Connecticut Coaches, Division of Athletics – November 18, 2003

Rodriguez NR. Nutrition for the Student-Athlete – Ellen Rennie's (CPIA) First Year Experience Course, November 2003 ( 1 lecture)

Rodriguez NR. Fad Diets – NUSC 166 March 30, 2004 (1 lecture)

Rodriguez NR. IRB at UConn – Undergraduate Research Workshop (Kathie Usher) – 1 lecture, March 30, 2004.

### Keynote/plenary Lectures at National/International Conferences:

Ferris A. "Strengthening Food Stamp Nutrition Education Outcomes: Linking applied research to nutrition education". 3/16/04. Food Stamp Nutrition Education National Conference, Columbus, OH

Fernandez, ML SLAN, Acapulco Mexico "Egg Consumption and Nutritional and Health Advantages", November 10, 2003

Fernandez, ML El Instituto del Huevo: "The misinformation regarding the relationship between egg consumption and cardiovascular disease", April 1, 2004 "Egg Consumption in school children. Metabolic Response" April 2, 2004

Pérez-Escamilla R. Effective breastfeeding promotion interventions in Latin America. XIIIth Latin American Congress of Nutrition. Acapulco, Mexico, November 9-13, 2003

Pérez-Escamilla R. Application of the USDA scale to measure household food insecurity in Brazil. XIIIth Latin American Congress of Nutrition. Acapulco, Mexico, November 9-13, 2003

Pérez-Escamilla R. Nutrition issues among Latinos living in the USA. XIIIth Latin American Congress of Nutrition. Acapulco, Mexico, November 9-13, 2003

**OTHER NEWS:** The University recently announced the formation of the University of Connecticut Center for Public Health and Health Policy. A true inter-disciplinary initiative, the Center will integrate and consolidate resources across campuses, provide key additional resources, and establish, in collaboration with recognized academic departments, doctoral training programs that support initiatives designed to expand our research opportunities in selected areas of public health. The Center will also expand University partnerships with the State Department of Public Health and local health agencies throughout Connecticut to enhance public health practice and support workforce development.

The Center will be under the leadership of co-directors Eileen Storey, M.D., MPH, Associate Professor of Medicine, and **Ann Ferris, Ph.D., R.D.**, Professor of Nutritional Sciences, and will be organized as an inter-campus, interdepartmental center reporting to Executive Vice President for Health Affairs and Dean of the School of Medicine, Peter Deckers, and Dean of the Graduate School and Vice Provost for Research and Graduate Education, Janet Greger. The Center will initially maintain facilities on the Storrs and Health Center campuses.

Kristin Herron, who earned her Ph.D. in May, has accepted a position with a biotechnology company, Entelos, in San Francisco, CA. She began the next step of her career in July.

Tom Peters, Assistant Dean for Graduate Student Affairs, asked Rajanighanda Dhokarh to be the flag carrier and lead the UConn Master of Science procession into Gampel Pavillion for Commencement ceremonies on May 8. This honor was awarded

to Rajani based on her distinguished academic performance. She had the highest GPA of all master's students in the University.

**Carol Lammi-Keefe** delivered the Convocation address on August 27. As a UConn Research Fellow, Dr. Lammi-Keefe was selected by the Provost to address the University community and give her perspective and remarks.

**TRAVEL NOTES:** Carol Lammi-Keefe traveled to Chile in July to collaborate with Dr. Jaime Rosowski at the Catholic University School of Medicine in Santiago. They are working on a project, 'Supplementation of Women with Gestational Diabetes Mellitus with DHA'.

**RESEARCH NOTES:** Marcela Vergara (Ph.D., 1998) visited the Department for one week at the end of July to learn some new laboratory techniques in Dr. Fernandez' laboratory. Dr. Vergara is currently a Professor in the Department of Chemistry at the University of Sinaloa in Culiacán, Mexico.

A new diet intervention study has begun, and Dr. Fernandez' lab group is recruiting participants: MEN over the age of 60 and POSTMENOPAUSAL WOMEN over the age of 50. Eggs have been found to be part of a heart healthy diet. The purpose of this research is to determine the effects of eating eggs on blood cholesterol levels. Benefits of participation: • Free cholesterol testing and other lab results • Nutritional advice • Monetary compensation - \$150.00. If you're interested in participating, please contact Dr. Maria-Luz Fernandez at (860) 486-5547 or Christine Greene at christine.greene@uconn.edu.

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of Health (NIH), Mexican polling firm, Data Opinión Pública y Mercados, and UConn's College of Continuing Studies.

As in past years, NUSC faculty have been extremely successful in securing extramural funding to support basic and applied research and develop and administer outreach/extension programs. The annual income from extramural funding (direct plus indirect) secured by faculty totaled \$2,816,482 for the 2003-2004 academic year, which exceeded the 2003-04's record. The faculty published 29 full-length articles in refereed journals, 8 book chapters, and presented 48 papers and abstracts at national and international conferences. Faculty served as members of editorial boards, organizers of national conferences, and members of federal grant review panels.

Last but not least, I am thrilled to welcome Dr. Steven Davis, our new faculty member, who will join us starting August 23. Steven received his Ph.D. in 2000 and 4 years of postdoctoral training from the University of Florida. His research interest is in studying the interactive effects of the status of folate and related B-vitamins and genetic polymorphisms on one-carbon/amino acid metabolism in humans as well as in animal and in-vitro models. Steven will help us to further expand our research into the area of nutrient-gene interactions and contribute to our instructional programs, particularly, in the areas of vitamins, minerals, and amino acid metabolism.

We also welcome Dr. Carol Lammi-Keefe back after having been on sabbatical for one full academic year.

As the Fall semester of 2004 starts next week, I am rationally "exuberant" about what we can accomplish together during this coming year. Again, thank you for your hard work and continued support for the Department. We look forward to meeting the challenges ahead!

With best wishes...*Sung I. Koo, Ph.D.*



## NUSC Outreach Updates

The UConn Family Nutrition Program has undergone a name change and will now be called Food Stamp Nutrition Education (FSNE).

The Community Nutrition Research Group participated in 10 health fairs during the summer throughout the state, targeting low-income caretakers and children. Recognizing the connection between non-healthy beverage options and the growing epidemic of obesity, the nutrition education booth addressed the importance of drinking water and reading nutrition labels for juice and sugar content in drinks. The group is also involved in a baseline survey on anemia knowledge, and a survey measuring food security, social capital and BMI status. Meredith Poehlitz conducted cultural nutrition tours for statewide WIC staff, visiting several ethnic grocery stores and restaurants in Hartford.

Through a Summer Undergraduate Research Fund, Bethany Graham developed and pilot tested a physical activity curriculum for pre-adolescent girls. This curriculum will be used in research this fall with low-income African American girls in Hartford. Vanessa Sawyer will be coordinating the Husky Reads program this year, which is already well underway.

Linda Drake has been working with Connecticut WIC Program, CT Department of Public Health, to develop a series of nutrition education materials on infant feeding, nutrition during and after pregnancy, and nutrition for toddlers for use with WIC participants. This project includes monthly meetings and presentations to WIC nutritionists, working on drafts of educational materials, working with a graphic designer and WIC leaders. Michelle Pierce created and facilitated nine workshops for WIC staff; four on how to facilitate groups, and five on using the internet. The internet sessions were divided into levels based on the participant-determined ability levels. The range extended from level 1 for novice internet users to level 3 for competent internet users.

Food Safety Activities: Ellen Shanley and Colleen Thompson continue to advertise via the web the Food Safety & Sanitation: A Distance Education Course. The course is available in English, Spanish, & Vietnamese. Information concerning the course may be found on the Internet at [http://www.team.uconn.edu/foodsafety\\_course/index.htm](http://www.team.uconn.edu/foodsafety_course/index.htm). There is an interactive component of the course which utilizes WebCT. Quizzes are available to students for each lesson, as well as additional resources, and an opportunity to ask questions of the instructors as well as others taking the course. Regular orders are coming in for this course. A new FightBac Board game is also being created, which has been tested in three states. Data is being analyzed at this time. Vignettes and a scenario type game are under development.

A USDA grant for food safety training and certification for under-educated and limited english proficient food handlers (UMass lead state) is in its first year. Several meetings have occurred with advisory committees as well as PI's from the states. Four food safety classes following the protocol will be taught by the end of June, with a target number of 100 participants.

### Team Nutrition Activities

The Team Nutrition 4 grant is in the process of winding down. In October of 2002, a workshop titled "Tools for Schools" was held in Middletown for 50 people in a number of school systems throughout the state. Jim Bogden from National Association of School Boards of

Education presented the workshop. However a very successful project Connecticut at Play was funded through this grant. It was a project that encouraged physical activity in children in Connecticut. There was collaboration with many other agencies in the state. Schools received a poster to track student's progress. In addition children participating received beach balls. 136 schools participated in this activity and 12,240 children received prizes for participation.

Team Nutrition 5 grant involved "Food For Thought: Promoting Nutrition and Learning in Early Childhood: Statewide 2- day conference held in Trumbull CT on Oct 17th and 18th for childcare providers. Over 200 childcare personnel attended this event.

A nutrition education CD-Rom was developed for early childhood educators: "Promoting Healthy and Eating and Physical Activity: A Distance Education Course for Early childhood." Over 100 educators and students recruited to participate in this distance learning initiative which utilizes WebCT. Data collected from this project is being analyzed.

Team Nutrition 6 - A statewide 2-day conference was held in Westbrook CT, March 15th and 16th, 2004 for interdisciplinary staff of public schools: "Making the Connection: Healthy Kids Learn Better." The conference was attended by over 300 people including school food service, teachers, administrators, nurses, and other interested school personnel from around the state.

Development of nutrition standards for vending and a la carte sales in CT schools is underway with a pilot project that serves as a state model for providing healthy food choices without negatively impacting profitability. This project is coupled with the development of a Healthy Vending and Snack Sales Action Guide to promote the Dietary Guidelines 2000 for foods and beverages sold in the school community. A document has been finalized for pilot testing, and six schools have been selected to participate. Team Nutrition is also providing mini-grants for local school districts to develop, adopt and implement school policies that promote healthy eating and physical activity, and foster a supportive healthy school environment. Six school districts have been selected to participate in this project.

### The UCONN Nutrition Club

The Nutrition Club participated in the Walk Against Hunger on Sunday, May 2. Five students walked in Hartford (3 miles) and 10 walked in Boston (20 miles). This was really quite a commitment, considering the events occurred the day before finals began. Donations were made to Foodshare in Hartford, and Project Bread in Boston.

Nancy Rodriguez was invited by the Nutrition Club to speak on "The Fad Diet Pendulum: A Study in Perpetual Motion" The event was held as an evening talk on April 16th at the Dodd Center Auditorium. About 50 people attended.

The new officers for the 2004-05 academic year were elected in May. Nicole Healy and Sarah Moore are co-Presidents, Kristen Donato is vice-president, Bethany Graham is treasurer, Kerri Dehm is secretary, James Lucas will handle public relations, and the historian is Meghan Ariagno.

## Alumni News

Let us know what's happening with you so we can share it here.

Kristin Herron (Ph.D., May 2004) has accepted a position with a biotechnology company, Entelos, in San Francisco, CA. She will begin the next step in her career in July.

Kelly Scribner (Ph.D., May 2004) will begin a post-doctoral fellowship at the Harvard School of Medicine at the end of August. She will be working directly with Cara Ebbeling (Ph.D., 1997).

Kelley S. Scanlon (B.S., 1983; Ph.D., 1989) is a part-time epidemiologist with the Maternal Child Health Branch, Division of Nutrition and Physical Activity, Centers for Disease Control and Prevention in Atlanta, Georgia. Kelley, husband Tom, and children Nicholas and Hannah announced the birth of Sarah Halle on July 25, 2002.

Jennifer Casterline Sabel (M.S., 1993) went with Lindsay Allen to UC Davis and completed her Ph.D. She is now working as an epidemiologist in the Injury Prevention Program for the Washington State Department of Health. She is also a mother to Brisa, who is now 2 years old.

Carolyn Jonas, Ph.D., R.D. (B.S., 1991) is now an Assistant Professor of Medicine at Emory University Center for Clinical and Molecular Nutrition, Division of Endocrinology, Metabolism and Lipids. She was one of the directors of a short course about Metabolic Syndrome: An obesity related national epidemic, held May 21-22, 2004 in Atlanta.

Vasuki Wijendran (Ph.D. 1999) delivered a 6 lb. 10 oz. baby boy on May 9th, Mothers Day, a perfect gift. His name is Seyon Wijendran, and is keeping his new parents very busy.

Sarah Couch (Ph.D. 1996) recently received tenure and was promoted to Associate Professor at University of Cincinnati, College of Allied Health Sciences, Department of Nutritional Sciences. Dr. Couch is serving on the Board of Editors for the Journal of the American Dietetic Association and as the Editor for the newsletter of the Hunger and Environmental Nutrition Dietetic Practice Group. Congratulations, Sarah!

Lauren Haldeman (Ph.D. 2001) will become the 2004-2005 Public Health Nutrition Division Chair-elect at the 2004 Annual Conference of the Society for Nutrition Education. Lauren is currently a faculty member in the Department of Nutrition at the University of North Carolina at Greensboro. Dr. Haldeman's areas of research include food insecurity, nutrition knowledge, attitudes, and behaviors among low-income, immigrant groups.

Gautam Reddy Bhimidi (M.S. 2004) began a residency program with UConn Department of Internal Medicine on July 1. He will be working at Hartford and St. Francis Hospitals.

Sonia Vega-López, (Ph.D. 2002) is now working as a post-doctoral fellow at the Cardiovascular Nutrition Laboratory, Jean Mayer USDA Human Nutrition Research Center on Aging Tufts University in Boston.

## AWARDS

Michelle Price Judge received the American Dietetic Association Gemple Research Award. She received \$5000 to use for her research. 'This research award encourages excellence in innovative and unique correlation of diet and nutrition in treating neurological disorders.' Michelle wrote her own proposal giving it the slant that was needed for the announcement. Michelle was also notified that she is the ADA Pediatric Research Group awardee for their scholarship.

Dr. Perez-Escamilla is the recipient of the College of Agriculture and Natural Resources Research Award of Excellence for 2004.

Molly McGrane received the 2004 Donald M. Kinsman Award of Excellence for undergraduate teaching from the College of Agriculture and Natural Resources Alumni Association (UCANRAA).

Nancy Rodriguez has been selected to receive an Outstanding Dietetic Educator Award for a Didactic Program (Area VII) from the American Dietetic Association. She will be honored at the national ADA meeting this Fall. She was also honored by the Connecticut Dietetic Association at their Spring meeting in May.

Candace Jones was selected by the Connecticut Dietetic Association as the Outstanding Didactic Student in Connecticut. She will be recognized at the CDA meeting on May 17th.

The Connecticut Dietetic Association also selected Ellen Shanley to receive the prestigious President's Award. This award is given to recognize an individual's commitment and contributions to the field of dietetics/nutrition. The recipient is considered a role model and exemplifies outstanding dedication to the nutrition profession.

### Departmental Scholarship Awards:

Hamilton D. Eaton Fellowship	Richard Wood
Janina Czajkowski Scholarship	Nurgul Fitzgerald
Kirvin L. Knox Excellence in Research	Kristy West

### Other Scholarships Awarded:

OSP Fellowship	Amrita Dutta
Egg Nutrition Center Fellowship	Kristin Herron, 2002-04
Egg Nutrition Center Doctoral Fellowship	Angela Bermudez-Millan 2004-06
Minority Graduate School Fellowships	Nitza Diaz Angela Bermudez-Millan
Nutmeg IFT Graduate Scholarships	Courtney Gaine Charlotte de Mare
National IFT award, 2003-2004 American Dietetic Association	Charlotte de Mare Michelle Price Judge

# Faculty Spotlight

**Steven R. Davis** joins the faculty this semester as an Assistant Professor. Dr. Davis has been working as a Postdoctoral Research Associate since 2000 with Jesse F. Gregory III, Ph.D. at the Food Science & Human Nutrition Department, University of Florida, Gainesville, Florida. In that position, he was a coinvestigator on three human clinical nutrition protocols that focused on the effects of B vitamin status and gene polymorphisms on the metabolism of the cardiovascular disease-related amino acid homocysteine. Based on his research findings, Steve recently traveled to Colorado to speak about the effects of dietary vitamin B6 depletion on the metabolism of homocysteine and cysteine at the FASEB Summer Research Conference entitled "Folic Acid, Vitamin B12 and One Carbon Metabolism."

Steve's major research interest relates to the effects of nutrient status and gene expression on protection against oxidative stress and inflammation. Initially his focus will be on the effects of vitamin B6 status on endogenous synthesis of cysteine. This pathway is composed of two enzymes (cystathionine  $\beta$ -synthase and cystathionine  $\gamma$ -lyase) that require pyridoxal 5'-phosphate, which is the

active coenzyme form of vitamin B6. The transsulfuration pathway is important to antioxidant defense because cysteine is the limiting amino acid for the synthesis of the antioxidant tripeptide glutathione. Therefore, if vitamin B6 status affects the synthesis of cysteine it could have an indirect impact on our antioxidant defense capacity by affecting glutathione synthesis. Initially, rodent models, including gene knockout mouse models, will be used to study the effect of vitamin B6 status and gene expression on glutathione synthesis and oxidative damage in response to oxidative stress. Steve hopes to study how nutrient status and polymorphisms of nutritionally-related genes affect glutathione synthesis in humans. This might include how B vitamins and other nutrients such as vitamin A, zinc, and betaine, interact with genetic polymorphisms, such as the methylenetetrahydrofolate reductase 677C-T polymorphism, to impact glutathione synthesis. Steve is particularly interested in studying this situation in humans who suffer clinical conditions associated with oxidative stress, such as certain inflammatory diseases. His overall goal is to define what nutrients, and what intakes of those nutrients, is needed to maximize the capacity for endogenous glutathione synthesis. He looks forward to working with the faculty, graduate students, and undergraduate students at UConn

in further investigation of these nutrient-regulated metabolic pathways.

Steve received his doctorate in Nutritional Sciences from the the University of Florida in 2000, under the tutelage of Robert J. Cousins, who is an alumnus of UConn NUSC. Dr. Cousins did his doctoral work with Dr. Robert G. Jensen here at UConn, and in 1991 was honored with the UConn Outstanding Alumni Award. Steve's doctoral work focused on regulation of zinc metabolism and metallothionein expression, and on the roles of metallothionein and dietary zinc as antioxidants using transgenic and knockout mice as animal models.

Although Steve arrived in Storrs directly from Florida, he is a native of New England, having grown up in Sutton, Massachusetts. He earned his baccalaureate degree in Chemistry at Worcester State College in Worcester, MA. Steve held the position of laboratory instructor and supervisor in the Chemistry Department at the College of the Holy Cross in Worcester, MA before moving South to sunny Florida. In addition to being excited about returning to New England and joining the Nutritional Sciences Department at UConn, Steve also looks forward to living in the college basketball capital of the world.

Welcome to UConn!

FRS # 250900



## What's Happening

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