

What's Happening

•January 16, 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.

As 2004 begins, I am very happy to report that 2003 was another productive and successful year for the Department of Nutritional Sciences (NUSC). I would like to thank all of you for your continued commitment and contributions, constructive suggestions, and thoughtful responses to our surveys and inquiries about NUSC programs.

On September 21-24, 2003, a comprehensive on-site review of NUSC programs was conducted by an external review team led by Dr. Melvin Mathias, a USDA CSREES National Program Leader for Human Nutrition. The review team consisted of two program leaders from USDA CSREES and three faculty members from land-grant institutions with comprehensive teaching, research, and outreach/extension programs. The review team recognized many of our strengths, and commended the faculty on the comprehensive integration of the Department's tripartite mission (teaching, research, and outreach/extension) in a balanced way. The review team also provided valuable recommendations for future planning and direction. They also noted that that in order to ensure continued success and productivity of the Department, further support from the University is critically needed in specific areas.

Despite the last year's budget constraints, our commitment to excellence remains unabated. To highlight the faculty's major accomplishments during the last academic year: NUSC faculty generated a record high number of student credit hours and secured a record high total of active grants and contracts, a 14% increase over the previous year's totals. In Fall 2003, the Department admitted fifteen new graduate students including four USDA Fellows into the Ph.D. program, with a record high number (55) of graduate students enrolled in our graduate programs. Our undergraduate enrollment also started to rise significantly due to the coordinated efforts made by faculty. In addition, faculty made significant efforts to introduce several new innovations in teaching. These innovations involve technology and student-centered learning. Most courses offered by the Department are now using WebCT to provide students with additional resources via the Web to supplement lectures. Web-based student exercises and problem-based learning also are being introduced into several undergraduate courses.

In 2003, while faculty excelled in their scholarly efforts,

continued on page 7

Meet the New Graduate Students - A record number of 15 new students began their graduate studies here this Fall. A short introduction to each follows.

Anju Balakrishnan is a registered veterinary practitioner in the state of Kerala in India. She comes from the city of Trivandrum, a coastal city located on the southwestern tip of India. She is studying nutritional biochemistry with Dr. Richard Clark.

Angela Bermúdez-Millan is not really new to the Department, as she received her B.S. in 1996 here in Nutritional Sciences, and then earned a M.P.H. in 2001. She has been working at the Hispanic Health Council in Hartford for the past few years as the program coordinator for PANA. She came from Arecibo, Puerto Rico to the United States in December 1991. She is working with Dr. Rafael Pérez-Escamilla as she begins her doctoral studies.

Pierre-Jacques Brun was born in Tassin, France which is located in eastern France near the border with Italy. Since his mother is a U.S. citizen, he has dual citizenship and spent some time each summer visiting family in the United States. He began his studies of medicine in Lyon, France and participated in an exchange program with Portland (OR) State University. He is specifically interested in researching the relationship between diabetes, gene expression, and nutrition, and is working with Dr. Molly McGrane.

Amrita Dutta has been teaching biology in a senior secondary school since 1998 in New Dehli, India. She received a M.S. degree in botany 1997 from the University of Calcutta. Teaching has developed her interest in nutrition, and is studying molecular nutrition with Dr. Hedley Freake.

Rachel Glennon is from Altamont, New York and earned her B.S. in biology from Catholic University of America in May 2003. Rachel participated in varsity athletics and also studied for a semester abroad at the University of Galway in Ireland. She is taking courses to qualify for a dietetic internship as well as pursuing a master's degree with Dr. Ann Ferris.

Christine Greene is originally from Dayton, Ohio. She earned a B.S. in Biology in 1978 from Denison University, then went on to earn a M.A. in Microbiology in 1980 and M.B.A. in 1982 from SUNY at Buffalo, NY. Since then she has worked as a personal trainer and coach in Glastonbury, CT. She is working with Dr. Maria Luz Fernandez.

Margaux Guidry grew up in Hope, Rhode Island and attended Canisius College in Buffalo, NY where she earned a B.A. in Communications in 2000. She then came to UConn and earned a M.A. in Education and Exercise Physiology last spring. She worked on a large clinical trial

continued on page 4

Research and Publications

NEW GRANTS AWARDED: Rafael Pérez-Escamilla (PI), Grace Damio (co-PI). The CT Family Nutrition Program for Infants, Toddlers, and Children (FNP-IT). Funded by the USDA Food Stamp Program. October 1, 2003, September 30, 2004. Total: \$723,625. Direct costs: \$676,517, Indirect costs: \$47,108.

Rafael Pérez-Escamilla (UConn PI), Anna Lartey (University of Ghana PI), Grace Marquis (overall grant PI: University of Iowa). Optimal Child Nutrition in HIV-affected Communities. NIH. 10/01/02-09/30/07. Total: \$299,413. Direct Costs: \$209,379. Indirect Costs: \$90,033.

PROPOSALS SUBMITTED: **Fernandez ML.** "Raisin Effects on Biomarkers of Coronary Heart Disease in Elderly Men and Women" California Raisin Marketing Board, \$73, 993

BOOK CHAPTERS: Pérez-Escamilla, R, Chapman, DJ. Influence of Stress on breast-feeding outcomes. *Elsevier*, submitted.

ARTICLES SUBMITTED: 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.*

Lofgren IE, Herron KL, Zern TL, West KL, Patalay MK, Shachter N, Koo SI & **Fernandez ML.** 2004. Waist circumference is a better predictor than body mass index for coronary heart disease risk in overweight premenopausal women. *J. Nutr.*

Lammi-Keefe CJ. (for the USDA Northeast 172 Technical Committee) Biochemical Indicators of Nutritional Risk as Indicators of Chronic Disease in the Elderly. *Topics in Clinical Nutrition* Chapman, D.J., Damio, M.S., Young, S., Pérez-Escamilla, R. Effectiveness of Breastfeeding Peer Counseling Among a Low-Income Latina Population: A Randomized Trial, *Arch Ped Adolesc Med.*

Pérez-Escamilla, R. Segall Corrêa AM, Kurmaran-Maranhã L, Sampaio F. The USDA food insecurity scale is a valid tool for assessing food insecurity in Campinas, Brazil. *J Nutr.*

Martin WE, Hanley LJ., Pikosky MA., Gaine PC, Maresh CM, Armstrong LE., Bolster DR., Rodriguez NR. Effects of increased protein intake on hydration indices. *Am J Clin Nutr* (January 2004).

Gaine PC, Viesselman, CT., Pikosky MA., Martin WF, Armstrong LE, FACSM, Pescatello LS., FACSM, Rodriguez NR. Leucine kinetics during endurance exercise training: significance of energy balance. *Medicine & Science in Sports and Exercise* (January 2004)

Bolster DR., Pikosky MA., Gaine PC., Martin WF, WolfeRR., Tipton KD., MacLean DA., Maresh CM.,Rodriguez NR. Dietary Protein Intake Impacts Skeletal Muscle Protein Fractional Synthetic Rates Following Endurance Exercise. *Am J Physiology* (January 2004)

ARTICLES ACCEPTED: 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* (in press).

West KL & **Fernandez ML.** 2003. Advantages of using guinea pigs to study the mechanisms of hypocholesterolemia associated with drug therapy. *Cardiovascular Reviews.* (in press).

Sciaudone MP, Yao L., Schaller M., Zinn SA. and **Freake HC.** Diet hyleneetriaminepentaacetic acid enhances thyroid hormone action by a transcriptional mechanism *Biological Trace Element Research*, December 2003.

Dharod, J., Segura-Perez, S, Damio, G., Bermúdez-Millán, A., Perez-Escamilla, R. Fight BAC! Campaign improves food safety awareness

and knowledge among Latinos in Connecticut. *Journal Nutrition Education Behavior.*

ARTICLES PUBLISHED: Green, BG. Hayes JE. Capsaicin as a probe of the relationship between bitter taste and chemesthesis. *Physiology & Behavior.* 79(4-5):811-821, 2003.

Herron KL & **Fernandez ML.** 2004. Are the current dietary guidelines regarding egg consumption appropriate? *J. Nutr.* 134:187-190.

West KL, Zern TL, Butteinger D, Keller BT & **Fernandez ML.** SC-435, an ileal apical sodium codependent bile acid transporter (ASBT) inhibitor lowers plasma cholesterol and reduces atherosclerosis in guinea pigs. *Atherosclerosis* 171: 201-210, 2003.

Noh, SK., **Koo, SI.** Egg sphingomyelin lowers the lymphatic absorption of cholesterol and a-tocopherol in rats. *J. Nutr.* 133: 3571-3576, 2003.

Noh, S.K., **Koo, S.I.**, Jiang Y. (+)-Catechin is a potent inhibitor of intestinal absorption of cholesterol in rats. *Nutraceuticals & Food*, 8:1-6, 2003.

Scribner KB., **McGrane MM.** RNA polymerase II association with the phosphoenolpyruvate carboxykinase (PEPCK) promoter is reduced in vitamin A deficient mice. *J. Nutr.* 133:000-000, 2003.

Ghoshal S., Pasham S., Odom DP, Furr HC., **McGrane MM.** Vitamin A Depletion is Associated with Low Phosphoenolpyruvate Carboxykinase mRNA Levels during Late Fetal Development and at Birth in Mice. *J. Nutr* 133: 2131-2136, 2003.

Anderson, AK, Damio, G, Himmelgreen, DA, Peng, YK, Segura-Perez, S, **Perez-Escamilla, R.** Social capital, acculturation and breast-feeding initiation among Puerto Rican women in the US. *Journal Human Lactation* 2004; vol 19.

Bermúdez-Millán, A., **Pérez-Escamilla, R.**, Damio, G., González, A. Segura-Pérez, S. Food Safety Knowledge, Attitudes and Behaviors Among Puerto Rican Caretakers Living in Hartford, CT. *Journal Food Protection* 2004; vol 67(2).

CONFERENCE PROCEEDINGS (Abstracts or Posters):

Clark RM., Herron KL., Waters D., **Fernandez ML.** Classification of the response to dietary cholesterol provided by eggs and gender predict lutein and zeaxanthin plasma concentrations. Experimental Biology April 17-21, 2004 Washington DC

Clark RM, Smolin LA., Eshun M., Mercier D. A Web-Based Nutritional Assessment Laboratory for Iron Deficiency Anemia. Experimental Biology April 17-21, 2004 Washington DC

Aggarwal D., Ballesteros MN., Cabrera RM., Socorro Saucedo M., **Fernandez ML.** Identification of risk factors for chronic disease in a population of young children in Northern Mexico Experimental Biology April 17-21, 2004 Washington DC

Cordero-MacIntyre Z, Tanzman JS, Torabian S, **Fernandez ML**, Sabate J. Daily Walnut Supplementation Impacts Blood Glucose Levels and Body Fat, Experimental Biology April 17-21, 2004 Washington DC

Fernandez ML., Ballesteros MN., Cabrera RM., Socorro Saucedo M. Egg consumption does not alter the LDL/HDL ratio and improves LDL atherogenicity in children from northern Mexico. Experimental Biology April 17-21, 2004 Washington DC

Herron KL., Lofgren IE., Adiconis X., Ordovas JM., **Fernandez ML.** An examination of possible genetic determinants of the plasma response of male and pre-menopausal women to a high cholesterol diet. Experimental Biology April 17-21, 2004 Washington DC

continued on page 3

Lofgren IE., Herron KL., Patalay M., West KL., Zern TL., Brownbill R., Lich-Ernst J., Koo SI., **Fernandez ML.** Identifying Risk Factors For Chronic Disease In Overweight Pre-Menopausal Women. Experimental Biology April 17-21, 2004 Washington DC.

Patalay M., Lofgren IE., **Freaker HC.**, Koo SI., **Fernandez ML.** The lowering of plasma lipids following a weight reduction program is related to increased expression of the LDL receptor and lipoprotein lipase. Experimental Biology April 17-21, 2004 Washington DC

Zern TL., Lofgren IE., Herron KL., West KL., Patalay M., Sharman M., Volek JS., Koo SI., **Fernandez ML.** A weight (wt) loss intervention results in less atherogenic LDL particles in pre-menopausal women. Experimental Biology April 17-21, 2004 Washington DC

Beeman SJ. **Ferris AM.**, Poehlitz M. A low literacy, bilingual web site continues to be an effective tool to disseminate nutrition information. Am. Dietetic Assoc. Annual Meeting, San Antonio, TX Oct 25-28.

Crowell R., Wood RJ., Wakefield D., **Ferris AM.**, Diaz N. Assessing Risk: Iron-deficiency is complicated by infection in high-risk preschoolers. Experimental Biology April 17-21, 2004 Washington DC

Henderson LS., Wakefield DB., **Ferris AM.** Rapid Weight Gain Predicts Early Childhood Overweight. Experimental Biology April 17-21, 2004 Washington DC

Weinstein JL., Garza, M., Curran, M., Petnicki P., **Ferris AM.** **Iron Deficiency Anemia:** Field Assessment of the World's Most Common Nutritional Disorder, Am. Dietetic Assoc. Annual Meeting, Oct 25-28, San Antonio, TX .

Kang HW., **Freaker HC.** Zinc Inhibits the Induction of S14 mRNA by T3 in Primary Rat Hepatocytes Experimental Biology April 17-21, 2004 Washington DC.

Judge MP., Loosemore ED., DeMare CL., Keplinger MR., Mutungi G., Cote S., Ryan M., Ibarolla B., **Lammi-Keefe CJ.** Dietary docosahexaenoic acid (DHA) intake in pregnant women. Am. Dietetic Assoc. Annual Meeting, Oct 25-28, San Antonio, TX

Courville AB., **Shanley EL.**, Thompson CA., Cummings MN. (New Mexico State Univ.), Kurzynske JS. (University of Kentucky) Improving High Risk Students Knowledge of Food Safety Using Computer-Based Learning. Am. Dietetic Assoc. Annual Meeting, Oct 25-28, San Antonio, TX .

Scribner KB, **McGrane MM.** RNA Polymerase II (RNA Pol II) Association with the Phosphoenolpyruvate Carboxykinase (PEPCK) Promoter is Reduced in Vitamin A-Deficient (VAD) Mice. Experimental Biology April 17-21, 2004 Washington DC.

West KL., **McGrane MM.**, Odom D., Keller BT, **Fernandez ML.** An apical sodium codependent bile acid transporter Inhibitor (ASBTi), SC-435, lowers plasma cholesterol by altering specific genes involved in hepatic cholesterol and lipoprotein metabolism in guinea pigs. Experimental Biology April 17-21, 2004 Washington DC

Segura-Pérez, S, Peng Y-K, Damio G, **Pérez-Escamilla R.** Differences in diabetes incidence and knowledge and attitudes and nutrition self-efficacy among bilingual and monolingual Spanish speaking Latinos living in Hartford, Connecticut. Experimental Biology , Washington DC, April, 2004.

Fitzgerald N., Segura-Perez S., Damio G., Peng Y-K, **Pérez-Escamilla R.** Diabetes risk factors, health care barriers, and nutritional knowledge and behaviors among Latinas. Accepted as a poster for the 2004 Centers for Disease Control and Prevention, Division of Diabetes Translation Conference, May 11-14 2004, Chicago, IL.

Fitzgerald N., Himmelgreen DA, Segura-Pérez S, Peng Y-K, **Pérez-Escamilla R.** Socioeconomic, cultural and demographic determinants of diabetes risk factors among inner city Puerto Ricans. Experimental Biology April 17-21, 2004 Washington DC

Peng Y-K, Segura-Pérez S., Damio G., **Pérez-Escamilla R.** Diabetes Radio public service announcement campaign among low-income Latinos with diabetes prevention messages in Connecticut: Coverage and consumer satisfaction. Experimental Biology April 17-21, 2004 Washington DC

Dharod J., Paciello S., Venkitanarayanan K. Bermúdez-Millán A., Damio G., **Pérez-Escamilla R.** Application of a chicken & salad HACCP like model to determine food safety risk factors at the household level in a Puerto Rican community. Experimental Biology April 17-21, 2004 Washington DC

Paciello S., Dharod J., Venkitanarayanan K., Bermúdez-Millán A., Damio G., **Pérez-Escamilla R.** Validation of a 'chicken & salad' household HACCP-like protocol among Puerto Ricans in by 10 Puerto Ricans from the inner city of Hartford, CT. Experimental Biology April 17-21, 2004 Washington DC

Chapman DJ., **Pérez-Escamilla R.** Who initiates breast feeding in response to peer counseling? Experimental Biology April 17-21, 2004 Washington DC

Anderson AK, Damio G., Young S., Chapman DJ., **Pérez-Escamilla R.** Impact of peer counseling on exclusive breast feeding among inner-city women: A randomized controlled trial. Experimental Biology April 17-21, 2004 Washington DC

Chinebuah-Aidam B., **Pérez-Escamilla R.**, Lartey A. A Randomized trial on the impact of peer counseling on exclusive breast feeding (EBF) in Ghana: Controlling for the Hawthorne effect. Experimental Biology April 17-21, 2004 Washington DC

Hromi A., **Pérez-Escamilla R.** Unintended Pregnancies are Associated with Less Likelihood of Breast feeding in Africa, the Mediterranean, and the Former Soviet Union Republics: A Global Analysis of Demographic Health Survey Data. Experimental Biology April 17-21, 2004 Washington DC

Otoo G., **Pérez-Escamilla R.** Changes in adjusted breast feeding duration in Peru between 1986 and 1996 as a function of education: Results from the Demographic and Health Surveys. Experimental Biology April 17-21, 2004 Washington DC

Dhokarh R., **Pérez-Escamilla R.**, Himmelgreen DA., Peng Y-K, Segura-Pérez S. Acculturation and household food insecurity among low-income Latinos in Hartford, Connecticut: The role of social capital. Experimental Biology , Washington DC, April, 2004.

Rafael Pérez-Escamilla, Susan Randolph, Ibrahima Hathie, Ibrahima Gaye. Adaptation and Validation of the USDA Food Insecurity Questionnaire in rural Senegal. Experimental Biology April 17-21, 2004 Washington DC

Segall- Corrêa AM., **Pérez-Escamilla R.**, Kurmaran-Maranhã L. Sampaio F, Vianna R., Vieira-Freire; L Yuyama; F Alencar; D Coitinho; M Gubert; M Leão; B Schimtz; Z Portela de Albuquerque; JA Escamilla. An adapted version of the USDA food security scale is a valid tool to assess household food insecurity in urban areas in Brazil. Experimental Biology April 17-21, 2004 Washington DC

Gaine PC., Pikosky MA., Martin WF. Bolster DR, Maresh CM., **Rodriguez NR.** Level of Dietary Protein Influences Whole Body Protein Turnover Post Exercise in Competitive Endurance Runners.

with Dr. Linda Pescatello who will continue to advise her as she pursues her doctorate.

Suzie Henderson hails from Lubbock, Texas and received a M.S. in Food and Nutrition from Texas Tech University in August 2002 and a B.S. in Biology from Hardin-Simmons University in 1999. Suzie's thesis work was on the amelioration of arsenic toxicity in rats supplemented with selenite. She is looking forward to broadening her laboratory background by working in the community on the Husky Nutrition anemia project with Dr. Ann Ferris.

Amber Hromi is from West, Hartford, CT. She earned a B.A. in psychology from Wheaton College in 1994, and a M.P.H. from UConn in 2002. After completing an internship working with Save the Children in Nakasongola, Uganda, she worked at the UConn Health Center as a project coordinator for a NIH multi-site study about college student drinking. She is working with Dr. Rafael Pérez-Escamilla to pursue a doctorate in the area of maternal and child nutrition.

Sun Kim worked for 10 years as a manager in the quality control laboratory at Orion Frito-Lay, a joint venture company for Frito-Lay in the U.S.A. and Tongyang Confectionery in Korea. She earned her bachelor's degree in agricultural chemistry in 1990 from Kyungpook National University in Seoul, Korea. She came to the U.S.A. in 2000 and is working in the area of food science with Dr. David Dzurec.

Hansa Leungsakul is interested in food science and microbiology. In her home country of Thailand, she observed that many agricultural resources are used inefficiently and wants to improve the situation and become a leader. As part of her academic training, she volunteered to work in a rural development camp in northeastern Thailand instructing natives about sanitation. Dr. David Dzurec is her major advisor.

Gloria Otoo earned her B.S. degree in Nutrition and Food Science from the University of Ghana in 2000. She worked for the WHO Multicentre Growth Reference study in Accra, Ghana. She is interested studying maternal and infant health issues in developing countries. Dr. Rafael Pérez-Escamilla is serving as her major advisor.

Kelly Sink graduated with honors from Georgia Institute of Technology in Aerospace Engineering in 1999. Since then she has been pursuing a Ph.D. in UConn's geophysics program. She decided to move to nutritional sciences because she believes there are more flexible career options to combine science and health. She is working with Dr. Carol Lammi-Keefe.

Lisa Vislocky earned a B.S. in 2002 in Mathematics at Lafayette College in Easton, PA. She served as the area coordinator for off-campus housing at Lafayette College last year while taking a few courses in kinesiology. She is interested in exercise physiology and is working with Dr. Nancy Rodriguez.

Richard Wood attended Springfield College where he earned a B.S. in Athletic Training in 1999, and a M.S. in Applied Exercise Science in 2001. He worked at NovaCare Rehabilitation since his graduation, developed an interest in integrating nutrition into his work with athletes. He is working with Dr. Maria Luz Fernandez.

Two new graduate students, **Sudeep Shrestha** and **Tsetan Dolkar**, were admitted into the graduate program for the Spring 2004 semester. Sudeep Shrestha is from Dharan, Nepal where he studied food technology and chemistry at Tribhuvan University. He will work with Dr. Maria Luz Fernandez' research group. Tsetan Dolkar is a Tibetan-Indian masters student who has joined Dr. Pérez-Escamilla's research group. She studied chemistry and biology at the undergraduate level, and environmental sciences and education at the graduate level at Mysore University in South India.

Graduate Students Completed

Master's Thesis defenses:

Lili Yao, Mechanisms By Which Chelation Of Zinc Enhance T3 Stimulated Gene Expression In GH3 Cells, July 31, 2003, Advisor: Hedley Freake.

Glorielle Gonzalez-Reyes, Determinants of Infant Feeding Behaviors Among a Predominantly Latino Population in Hartford, CT, September 3, 2003, Advisor: Rafael Pérez-Escamilla

Rajanigandha Dhokarb, Acculturation and Household Food Insecurity Among Low-Income Latinos in Hartford, Connecticut, October 20, 2003, Advisor: Rafael Pérez-Escamilla

Kara B. Tamburri, Maternal Anemia, Prenatal Health, and Birth Outcome in a Low-Income Population, October 22, 2003, Advisor: Ann Ferris.

Stefania Paciello, Validation of a "Chicken & Salad" Household HACCP Analysis Protocol in a Puerto Rican Community, November 5, 2003 Advisor: Rafael Pérez-Escamilla

Ph.D. Prospectus defenses:

Nurgül A. Fitzgerald M.S., R.D., Identification of Risk Factors Mediating the Association of Socioeconomic, Cultural, and Demographic Variables with Type II Diabetes Across Ethnic Groups, July 2, 2003 Advisor: Rafael Pérez-Escamilla.

Alex Kojo Anderson, MPhIL Impact of Peer Counseling on Exclusive Breast feeding: A Randomized Controlled Trial, October 23, 2003, Advisor: Rafael Pérez-Escamilla.

Ingrid Lofgren M.P.H., R.D. Effects Of A Weight Loss Program Including Calorie Restriction, Exercise, And A Dietary Supplement On Lipoprotein Metabolism. October 28, 2003, Advisor: Maria Luz Fernandez

Tocsa Zern, Cardio Protective Effects Of Grape Polyphenols In The Post-menopausal State, November 20, 2003 Advisor: Maria Luz Fernandez.

Jigna Dharod, Development Of A HACCP-like Model For Home Prepared "Chicken & Salad" In A Puerto Rican Community, December 4, 2003. Advisor: Rafael Pérez-Escamilla.

Ph.D. Dissertation defense:

Matthew Pikosky M.A. R.D., Skeletal Muscle Protein Turnover in Runners and Endurance Trained Adults Consuming the RDA for Protein. August 21, 2003, Advisor: Nancy Rodriguez.

Research and Publications...continued from page 3

Experimental Biology April 17-21, 2004 Washington DC.

MA Guidry, BE Blanchard, AL Taylor, CM Maresh, FACSM, PD Thompson, FACSM, and LS Pescatello, FACSM, University of CT, Storrs, CT; and Hartford Hospital, Hartford, Ct The Duration Of A Light Intensity Exercise Bout Affects Postexercise Hypotension ACSM Meetings

Pikosky MA, Gaine PC., Martin WF., Ferrando AA., Wolfe RR., **Rodriguez NR.** Skeletal muscle protein turnover following an endurance exercise bout in healthy men and women. Am. College of Sports Medicine Meeting.

TECHNICAL REPORTS: Segall Corrêa A.M., **Pérez-Escamilla, R.**, Kurdian Maranhã, L., Archanjo Sampaio F.M. (In) Segurança Alimentar no Brasil: validação de metodologia e de instrumento de coleta de informação. Universidade Estadual de Campinas, Departamento de Medicina Preventiva e Social, 2003.

Segall Corrêa A.M., **Pérez-Escamilla, R.**, Kurdian Maranhã, L., Archanjo Sampaio F.M. (In) Segurança Alimentar em Campinas: Inquérito de base populacional. Universidade Estadual de Campinas, Departamento de Medicina Preventiva e Social, 2003.

Pérez-Escamilla, R. The MADLAC Experience in El Salvador: National Results. Arlington VA: BASICS II, 2004.

INVITED TALKS: Fernandez ML. "Egg Consumption: Nutritional and Health Advantages", Sociedad Latinoamericana de Nutricion, Acapulco, Mexico, November 10, 2003.

Drake LT. "Food Attitudes"-- presentation at the Society for Nutrition Education annual conference on "Food Choice...why we eat what we eat", July 29, 2003, Philadelphia, PA.

Drake LT. "Hot Topics in Nutrition" -- presentations at the New England Nutrition Education Conference, 11/06/03, Ogunquit, ME.

Rafael Pérez-Escamilla spoke, on behalf of his graduate student Bridget Chinebuah-Aidam, "Impact of Peer Counseling on Exclusive Breast feeding in Ghana", RIING Project Conference, Legon, Ghana, 08/12/03.

Rafael Pérez-Escamilla: "Breast feeding and Obesity: Illuminating the Way through Epidemiology and Anthropology" and Donna Chapman: "Breast feeding Peer Counseling: Does it Really Work? Recent findings from the US", Centers for Disease Control and Prevention (CDC) Division of Nutrition and Physical Activity seminar series, Atlanta, GA, 10/08/03.

Rafael Pérez-Escamilla was a panelist at the Forum 'Human Rights and Food Security in Africa' organized by the UConn's World Food Day Committee, 10/16/03. He spoke about how the vertical transmission of HIV through breast milk has severely affected the food security of millions of infants in Africa.

Rafael Pérez-Escamilla, "Nutrition During Humanitarian Emergencies" Wayne Norman Morning Show, WILI Radio, Willimantic CT, 10/14/03.

Dr. Pérez-Escamilla gave three invited talks in the areas of breast feeding, food insecurity and nutrition among Latinos in the USA at the congress of the Latin American Nutrition Society (SLAN). Acapulco, Mexico, November 9-13, 2003.

Rafael Pérez-Escamilla, Grace Damio, and Yu-Kuei Peng gave the talk 'Diabetes among Latinas: Findings and recommended actions'. Diabetes Call to Action Statewide Task Force, Hartford, CT 01/13/04.

Nancy Rodriguez gave presentations on 09/11/03 and 10/27/03 about Performance Nutrition to Trinity College Athletes in Hartford, CT.

Nancy Rodriguez, "Nutritional considerations for physically active children and competitive athletes," December 2-3, National Cattleman's Beef Association Nutrition Research Discovery Conference, Denver, CO

OTHER NEWS: Ken Hall went to Chicago in October to attend the Food Science Communicators meeting of the Institute of Food Technologists. A half-day program was about how to control radio and TV interviews, with one hour focused on potential bioterrorism associated with the food supply. Dr. Hall has agreed to be a member of the 2004 USDA Integrated Food Safety Panel to review RFAs.

Linda Drake was elected Vice Chairperson for the Connecticut Food Policy Council, 2003-2004.

Dr. Pérez-Escamilla was invited as a scientific advisor to the "WIC Breastfeeding Evaluation: Expert Panel" meeting, USDA Food and Nutrition Service, Alexandria, VA, September 8.

Dr. Pérez-Escamilla was invited by BASICS to serve as an expert scientific advisor for the AIN (National Child Nutrition/Growth Monitoring Program)-Honduras evaluation and for the global launching of the breast feeding monitoring MADLAC that he introduced into Honduras, Ecuador and El Salvador

A symposium for the 51st Annual Meeting of the American College of Sports, June 2004, Indianapolis, IN was submitted and accepted, "Assessment of Body Composition in Collegiate Athletes: What's the Point?" Organizer and Chair – Nancy Rodriguez, Presenters – N.R. Rodriguez, J. Anderson, R. Howard (UCONN), D. Benardot (Univ. GA), K. Clark (Penn. State Univ.)

TRAVEL NOTES: The University travel office is enforcing a policy that travel reimbursements must be submitted less than six months after travel is taken. If someone holds onto their travel reimbursements longer than six months, the University travel office will not process the reimbursement.

RESEARCH NOTES: Dr. Maria Luz Fernandez and her research group are recruiting pre-and post-menopausal women to evaluate the effects of grape polyphenols on protecting against coronary heart disease and atherosclerosis. A formulated beverage will be administered to subjects. They will measure plasma lipids, markers of inflammation in the blood and urine and for susceptibility of LDL to oxidation. They expect the treatment to have more effects on postmenopausal women.

Over the Winter break, Rafael Pérez-Escamilla and UConn political science doctoral student Pablo Parás completed a food security assessment in a representative sample of Mexico City (N=800 households), one of the world's largest metropolises.

Rafael Pérez-Escamilla was invited to participate in a food security meeting at the Pan American Health Organization (PAHO) office in Brasilia, July 25, 2003. The purpose of this meeting was to discuss recent research findings on the validity of an adapted version of the 18-item USDA food insecurity questionnaire tested in four urban areas in Brazil using qualitative and quantitative approaches. This multi-institutional effort involving the target communities, 4 government ministries, and 4 universities/research institutes has been led by Drs. Pérez-Escamilla and Ana Maria Segall Corrêa from the University of Campinas with strong support from the Brazilian Ministry of Health and PAHO-Brazil.

Rafael Pérez-Escamilla is the chair-elect of the Community Nutrition and Public Health (CNPH) Research Interest Section (RIS) of the American Society for Nutritional Sciences (ASNS). As such, he had a busy December break coordinating the CNHP mini symposium and poster sessions for the upcoming Experimental Biology meetings.



NUSC Outreach Updates

The UConn FAMILY NUTRITION PROGRAM (FNP) is a USDA funded grant through the CT Department of Social Services to provide nutrition education to food stamp recipients. Funding was continued for this year, and a new project was added to the array. Ellen Shanley and Colleen Thompson are working on "After School Healthy Meal Planning" - A hands-on after school project targeting middle and high school students providing instruction about healthy meal planning and preparation, grocery shopping, budgeting, and food safety and security.

The Husky Reads Fall Semester 2003 was our busiest yet! Forty-six students volunteered to participate in our literacy and nutrition education program in the pediatric primary care centers in Hartford, two students taught a cooking and nutrition class to children in an after school program at Girls Inc. in Hartford, and one student perfected a new nutrition education game for children she developed, "Nutrition Twist-Up." Program staff this semester included Valery Phillips and Rachel Glennon, graduate students in the department, Bethany Graham, a junior-level undergraduate, and Meredith Poehlitz, Project Director.

Dr. Pérez-Escamilla reports that during fiscal year 2002-2003, FNP-IT had 10,500 children-contacts through its food and nutrition puppet show series delivered at Hartford, and surrounding areas, public schools. The 700 evaluations filled out by teachers who viewed the shows indicated that the overwhelming majority found them to be of excellent educational quality emphasizing how fun, age-appropriate and culturally competent they were. Teachers felt that these shows have enormously boosted their interest in nutrition and on the amount and quality of nutrition education taught to low-income Connecticut kids at school. The full 2002-2003 FNP-IT annual report is available online at www.hispanichealth.com/pama.htm. The 2003-2004 FNP-IT central theme is childhood obesity prevention. Please keep your eyes open for our exciting new initiatives including the development of a highly interactive physical activity puppet show that fosters less TV viewing!

OTHER OUTREACH EFFORTS

Pediatric obesity is a growing problem. The objectives for the Healthy People 2000 has made this obesity problem a major public health initiative. The design and implementation of appropriate weight management protocols for young children that integrate diet and physical activity is the focus of a newly released book, "Overcoming Childhood Obesity," which was written by Ellen Shanley and Colleen Thompson, and published this fall by Bull Publishing. Ellen Shanley appeared "live" on TV30 morning news show on January 8, 2004 to promote the book. A signing and preliminary release was done at the Annual Meeting of the American Dietetic Association in San Antonio in October 2003. Several media have contacted Ellen and Colleen for interviews including CT Magazine, Weight Watchers, NBC30, and CBS in New York.

CT Team Nutrition- Food for Thought: Promoting Nutrition and Learning in Early Childhood conference was held in October in Trumbull. Over 200 child care directors and teachers attended the two day event to hear nationally renowned child feeding experts Janice Fletcher and Laurel Branen speak.

A CD-ROM is currently being developed for early childhood educators on promoting healthy eating and physical activity. 100 people have been recruited (including over 30 UCONN undergraduates) to pilot test this distance education course. The course has 8 lessons and

includes a manual, WebCT access, and lots of course materials and resources.

We are reviewing applicants from all over the state to participate in a Healthy Vending and Snack Sales project. We will be going and replacing all snack and vending items with healthier choices, evaluating student acceptance, cost effectiveness and feasibility of such an undertaking. Over 25 schools applied to participate but we are selecting fewer than 10 to receive the intervention. We are also reviewing applications from school districts in CT to implement nutrition policies in their schools. Over 25 applications are being review and 10 schools will be selected to receive technical assistance and a stipend to assist them with developing nutrition policies that will be implemented district wide and adopted by boards of education.

A summit, "Making the Connection: Healthy Kids Learn Better" is being planned for March 15th and 16th, 2004 at the Waters Edge Resort. Teams from schools will be invited to attend and hear local and national success stories on improving the nutrition and physical activity habits of school children. This event is co-sponsored with the CT State Department of Education, Department of Public Health, CT School Food Service Association, New England Dairy and Food Council, and the American Cancer Society.

Colleen Thompson was invited to speak about childhood obesity at the CT Association for Family and Consumer Science teachers annual meeting in Southbury in November.

The Expanded Food and Nutrition Education Program (EFNEP) is celebrating 35 years of success in helping low income families with children eat a healthier diet and save money on food at the same time. A national celebration will occur on March 2, 2004, in Washington DC. Under the leadership of Emeritus Professor Janina Czajkowski Esselen, Connecticut developed a pilot project in 1965, training women from communities to provide nutrition education in housing projects. An independent study by the Produce for Better Health Foundation in 2002 found that EFNEP is by far the most effective federal program in increasing consumption of fruits and vegetables. For more information about EFNEP, contact Linda Drake, CT EFNEP Director. Linda.Drake@uconn.edu.

The UCONN Nutrition Club

An article about the Nutrition Club was recently featured in the CANR Journal. There is a new page on the NUSC website about the Nutrition Club, which includes some pictures from activities this year. You can check it out at the following address: www.canr.uconn.edu/nusci/hpg/NClub.html.

The Nutrition Club has been very active. Here's a listing of some of their activities for Fall 2003:

- Activities Fair
- Fall Health and Wellness Fair
- Cornucopia
- Walk For Diabetes
- Countdown to Commencement
- CDA Fall Meeting Nov. 4th
- Food Drive
- Holiday Party

Alumni News

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

John Contois (Ph.D., 1994) moved to UMass Medical School in Worcester, MA in July. He has been appointed Assistant Professor of Pathology, Director of Chemistry, and Associate Director of the Core Laboratory in the Department of Hospital Laboratories.

Matt Pikosky (Ph.D., 2003) has been hired as a technical services contractor working in the Military Nutrition Division of USARIEM (US Army Research Institute of Environmental Medicine). He will be commissioned as an Army Captain after completion of basic training. Then his title will be Post Doctoral Research Fellow at USARIEM, Military Nutrition Division, Natick, MA. He will be working with both nutrition and exercise physiology people at Natick, and will be looking at interactions of diet and exercise on protein metabolism with ultimate goal of improving the performance of soldiers.

Maureen Murtaugh (Ph.D., 1991) is now working as an Associate Professor in Family and Preventive Medicine at the University of Utah Health Research Center.

Silke Vogel (Ph.D., 1996) accepted a position as assistant professor at the Columbia University Institute of Nutrition. She recently found out that she won an NIH RO1 grant for about \$1 million, which will begin in Spring 2004. Silke also delivered her second son, Axel, on August 4th at 2:15 a.m. He weighed in at 6 lb. 7 oz.

Susanne Russell (B.S. 2001) is working at Quincy (MA) Medical Center as an outpatient/clinical Dietitian, and will be sitting for the CDE exam soon. She is planning to get married this summer.

From the Department Head...continued from page 1

they were very active in serving national and international societies and communities and made significant contributions to professional and public service: Rafael Pérez-Escamilla was elected President of the Community and Public Health Nutrition Research Interest Section, ASNS, and delivered ten invited lectures on lactation, breast feeding, food security and hunger, and community nutrition in West Africa, Brazil, and Mexico, while on sabbatical leave. Through the FNP-Infants, Toddlers and Children (FNP-IT) program, he also reached 200,000 Hispanics in Connecticut and Southwestern Massachusetts through a biweekly food safety and nutrition radio show, and a diabetes prevention radio campaign aired by a popular radio station based in Hartford. Maria Luz Fernandez presented a series of seven lectures on dietary habits, lifestyle, and cardiovascular disease in Peru and Mexico as invited by US Grains and American Soybean Association. She also served on a Special Emphasis Panel for the NIH National Center for Complementary and Alternative Medicine. She currently serves as Associate Editor of the Journal of Nutrition,

AWARDS

Kristi Herron (*major advisor: Maria Luz Fernandez*) won a \$500.00 travel award to attend an American Egg Board national meeting, and to present her poster, *Classification of the response to dietary cholesterol provided by eggs predicts lutein and zeaxanthin plasma concentrations,* in Washington DC on September 23.

Bridget Chinebuah-Aidam (*major advisor: Rafael Pérez-Escamilla*) received word that she has won one of the prestigious International Society for Research in Human Milk and Lactation (ISRHML) Young Investigator travel awards in recognition of the quality of her study submitted for EB'04. She will be publicly recognized at the EB-ISRHML business luncheon in Washington DC in April.

The Chancellor's Research Excellence Award program recognizes excellence in research at the Storrs and regional campuses, and is an open competition for tenured faculty in all disciplines. The Research Excellence designation is given to four faculty, and is accompanied by a stipend of \$2,500, to be used at the awardee's discretion in support of his or her research. Recipients are honored annually at the May 2004 graduate commencement ceremony. Dr. Carol Lammi-Keefe will be one of this year's recipients. Congratulations!

and three other faculty (Rafael Perez-Escamilla, Hedley Freake, and myself) serve on the editorial board of the same journal. Ann Ferris served on a USDA CSREES Community Nutrition Development Committee, USDA Food Assistance and Nutrition Research Program Panel, and USDA NRI Human Nutrition and Obesity Panel. Ellen Shanley was elected to the Finance Committee of the American Dietetic Association, and co-authored an excellent, timely guidebook with Colleen Thompson, entitled "*Overcoming Childhood Obesity*". Currently, we are in the process of searching for a new faculty member to fill a position vacated by a retirement, and hope to have a new faculty on board by the Fall semester. This position will help us to further diversify our research programs and make contributions to our undergraduate and graduate instructional programs.

As I write this letter, the Storrs campus still remains quiet, covered with crunching snow as Arctic air moves into New England. Next week, however, the campus will be transformed into a busy lively town with an influx of students as we begin the Spring 2004 semester. I look forward to working with you for another successful year.

I wish you and your family a happy and productive year!

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

Faculty Spotlight

More than a decade ago, Dr. Carol Lammi-Keefe's research group began collaborating with clinicians at Hartford Hospital. The team's research focus was on the connection of dietary intake and function of essential fatty acids in pregnant women with gestational diabetes mellitus (GDM). Fatty acids are essential for central nervous system (CNS) function and cognitive development, and babies born to GDM mothers were observed to be at risk for later developmental problems. They found and confirmed that women with GDM transferred less essential fatty acids to the fetus compared to healthy women. Could a dietary intervention with these mothers make a difference to both the mother's and infant's CNS function? With a grant from the Donaghue Foundation, Dr. Lammi-Keefe's team followed up with an investigation on how to measure CNS function in infants. Using an instrument developed by Dr. Evelyn Thoman (Psychology), they found infant sleep patterns were a functional marker of maternal and infant docosahexaenoic acid (DHA) status. DHA is a long chain product of an essential fatty acid, and is found in cold water marine fish. Infants with higher DHA levels were observed to have sleep patterns indicative of a better devel-

oped CNS. These exciting findings enabled Dr. Lammi-Keefe to present the importance of DHA to the developing infant to diverse audiences in the areas of medicine, psychology, biochemistry, and nutrition. During the same time period, the first commercial infant formula supplemented with DHA was marketed by Mead Johnson (Feb. 2000), and now DHA infant formulas are being advertised on national television to produce "smarter babies."

Since completing her term as Department Head, Dr. Lammi-Keefe has been working with her research group on her current USDA grant, "Can DHA-Functional Foods in Pregnancy Enhance Neurodevelopment?" Healthy pregnant women recruited at Hartford Hospital are being given cereal bars supplemented with DHA provided by Nestle, Inc. This longitudinal, randomized, double-blind, placebo-controlled, multi-disciplinary study works with mothers from the middle of pregnancy, followed by evaluation of the infant through the first year. The main hypothesis being tested is whether maternal dietary intervention with DHA has an effect on infant sleep patterns, an indicator of CNS maturity, and other functions such as vision, behavior, attention, memory, and temperament.

The results of the current efforts are also leading to new questions about how fatty acids function

during and after pregnancy. Because results have shown that DHA impacts neurological function, does supplementation during pregnancy have an effect on postpartum depression? Are there gene-nutrient interactions, and what are they? Does DHA have a long-term effect on cardiovascular risk factors? There is currently a keen interest among many researchers about whether DHA impacts metabolic syndrome characterized in part by glucose intolerance and increased blood lipids, which may lead to coronary heart disease.

Dr. Lammi-Keefe is on sabbatical leave for the 2003-04 academic year. She is working on writing proposals to address these questions, and will visit Catholic University in Santiago, Chile during the Spring semester, where an ongoing study is assessing the incidence of GDM in relation to dietary DHA. This project complements the work accomplished here, and would be an opportunity to work with a population unlike any here in the United States, as the incidence of GDM is two to three times higher in Chile compared to the U.S.A. Dr. Lammi-Keefe's creative talent and persistence in leading this successful student training and research program will be recognized and honored at commencement in May 2004, where she will receive a prestigious Chancellor's Research Excellence Award.

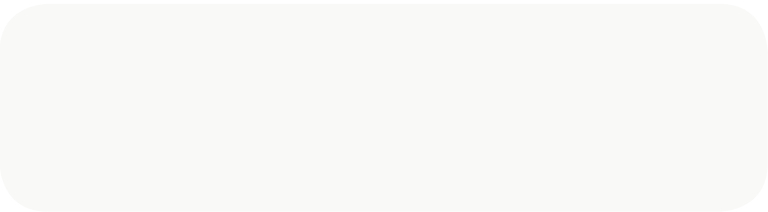
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University of Connecticut

What's Happening

<i>In this Issue:</i>	
<i>From the Department Head</i>	<i>Page 1</i>
<i>Mee the New Graduate Students</i>	<i>Page 1</i>
<i>Publications</i>	<i>Page 2</i>
<i>Graduate Students Completed</i>	<i>Page 4</i>
<i>Outreach Notes</i>	<i>Page 6</i>
<i>Alumni News</i>	<i>Page 7</i>
<i>Awards</i>	<i>Page 7</i>
<i>Faculty Spotlight</i>	<i>Page 8</i>



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