



Nutritional Sciences News

Division of Nutritional Sciences University of Illinois at Urbana-Champaign

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A Word from the Editor

This has been a fruitful year for the Division, and it is my pleasure to bring you this edition of *Nutritional Sciences News*, which, as you can see, has a new look. Thanks to all faculty, students, and alumni who provided information or otherwise contributed to this issue. I would like to encourage more people to contribute next year. Alumni, please inform the Division office of any address or position changes. Have a wonderful, productive year!

Thank you,

Joan O. Ham

From the Director

As we begin our second 25 years as a graduate program in Nutritional Sciences, we look forward to continued excellence in education and training. We are at an all time high level for graduate student enrollment and continue to attract high quality applicants to our program. As will be evident from this newsletter, both our students and faculty are well recognized nationally for their accomplishments.

Joan Ham has done an excellent job for the second year in providing you this annual newsletter. I want to thank those alumni who keep us up-to-date on their activities. We have over 200 graduates and would love to hear from all of you next year.

Many of you have heard about the ongoing reorganization of the College of Agriculture, the lead

College for the Division. While a major administrative revision is planned (13 administrative units will be reduced to 6 or 7), there will be no direct impact upon the Division activities or functions. Once the restructuring of the College is approved by the University Senate and Illinois Board of Higher Education, the administrative structure of the School of Human Resources and Family Studies will be dissolved and divisions of the school will join colleagues from other departments. For example, the Division of Foods & Nutrition will join Food Science to become the Department of Food Science & Human Nutrition. These changes can be expected by Fall 1995.

Last year I announced the creation of the Willard J. Visek Lectureship in Medical Nutrition and indicated that we were seeking contributions. A hearty thanks goes out to numerous alumni and friends who contributed to the Lectureship. We hope to accumulate sufficient endowment to begin the annual Lectureship in the near future. Any of you who would like to contribute can do so through the University of Illinois Foundation or my office.

Among the highlights of the previous year have been the annual Nutrition Bowl and Experimental Biology poster competitions (now called Nutrition Symposium), both organized and run by the students from NSGSA, the annual External Advisory Committee meeting and the annual reception for graduates at the 1994 Experimental Biology meeting. Please look for the University of Illinois banner again in 95 in Atlanta at the Experimental Biology meeting general college reception.

Sincerely yours,

John W. Erdman, Jr.
Director

Invited Lecturers Present Seminars

This past academic year five distinguished scientists from industry, government, and academia presented seminars to NS faculty and students. Division alumnus, Dr. Guy Johnson (Ph.D., 1976), Director of Nutrition at Pillsbury, discussed "The Role of Nutritionists in Industry". Dr. Roy Martin of the University of Georgia presented "Endogenous Food Intake Regulation". Dr. Cathie Woteki, Senior Policy Analyst of the Office of Science and Technology Policy at the White House, Washington, DC presented "Nutrition Policy and the RDA's". Dr. Richard Rivlin from the Sloan-Kettering Cancer Center in New York spoke about "Nutrition and Cancer". Dr. Judith Stern of the University of California at Davis presented a lecture on "The Women's Health Initiative: Nutritional Perspectives" as part of Nutrition Symposium '94.

New Faculty Elected to the Division

The Division of Nutritional Sciences welcomes two new faculty members. Dr. Bahram H. Arjmandi, Assistant Professor, Department of Human Nutrition and Dietetics, University of Illinois at Chicago, studies bone and calcium metabolism as it relates to osteoporosis; the roles of dietary calcium, estrogen, phytoestrogens, insulin-like growth factor-I, and growth hormone in bone and calcium metabolism; and food restriction in aging. Dr. Suzanne R. Trupin, M.D., Head and Clinical Professor, Department of Obstetrics and Gynecology, UIUC College of Medicine, studies osteoporosis prevention, exercise and age-related bone loss, and body composition of women; nutritional requirements and metabolism in pregnancy; lipid metabolism issues in contracepting and menopausal women; and estrogen replacement therapy.

International Activities of NS Faculty

Dr. David H. Baker spoke at the University of Gieben in Germany and at the University of Wageningen in the Netherlands in May, 1994.

Dr. Sharon M. Donovan was an invited lecturer on "IGF and EGF in the Neonatal Intestine: Development of a Piglet Model" at the International Conference on Hormones and Growth Factors in Milk in Bratislava, Slovakia.

Dr. Robert A. Easter presented four lectures on swine nutrition to the Caribbean Basic Livestock Extension Service in Atenas, Costa Rica. He also gave three lectures on amino acid nutrition of pigs in Krasnodar, Russia.

Dr. John W. Erdman, Jr. provided a seminar on "Absorption and Metabolism of Carotenoids" at the Heinrich Heine University of Dusseldorf, Germany for graduate students and faculty of the Institute for Physiological Chemistry.

Dr. Keith Kelley presented a lecture on "A Role for IGF-I during Myeloid Cell Growth and Differentiation" at the Third International Symposium on Insulin-Like Growth Factors in Sydney, Australia.

Dr. James L. Robinson made presentations at the Fifteenth International Congress on Nutrition, Adelaide, Australia in September, 1993, the Annual Meeting of the New Zealand Society for Animal Production, Palmerston North, New Zealand in February, 1994, and the Annual Conference of the Australian Veterinary Association in Canberra, Australia in March, 1994. He also spoke at the Fifth World Congress on Genetics Applied to Livestock Production in Guelph, Ontario, Canada in August, 1994.

Dr. Willard Visek attended the International Congress on Nutrition in Adelaide, Australia in September, 1993.

Dr. Matthew Wallig spoke on "Mechanisms of Cell Death" and "Pancreatic Pathology" at the Annual Symposium of the European Division, C.L. Davis Foundation for the Advancement of Pathology, ZENECA Pharmaceuticals in Alderley Park, Cheshire, United Kingdom.

Faculty Give National Presentations

Dr. David H. Baker lectured on "Applications of the Ideal Protein Concept for Poultry" at the California Nutrition Conference in Fresno. At the Minnesota Nutrition Conference, he presented two lectures: "Uses of Ideal Protein in Swine Formulation" and "Evolution of the Ideal Protein Concept". Dr. Baker also spoke on "Feeding Pigs and Poultry for Maximization of Lean Growth and Minimization of Nitrogen Excretion" at the Cornell Nutrition Conference in Rochester, NY.

Dr. Karen M. Chapman presented "Energy Balance in Chronic Obstructive Pulmonary Disease" at the Advances in Human Energy Metabolism Conference in Beltsville, MD. She also discussed "Nutrition Related Risk Factors in the Elderly in Illinois" at the Chronic Disease Prevention and Health Promotion Conference in Kansas City, MO.

Dr. Jimmy H. Clark spoke on "BST: Issues and Answers" at Lonza/Premiere Agri Technologies Dairy Seminars in Everett and Bellingham, Washington and at the Illinois Department of Public Health. He also discussed "Niacin for Dairy Cows — Illinois Experiments" at the Lonza/Premiere Agri Technologies seminars. Dr. Clark presented "Role of Bypass Protein in Dairy Rations" at the 24th National Alfalfa

Symposium in Springfield, IL, as well as "Ruminal Fermentation and Protein Utilization by Dairy Cows" at the Alltech Nutrition Symposium for Dairy Consultants in Las Vegas, NV.

Dr. Robert A. Easter discussed "Growth Modeling" at the Henwood Feed Conference in Dayton, OH, and "Growth Management for Consumer Appeal: Producers Challenge" at the American Feed Industry Association meeting in St. Louis, MO. He also lectured on "Factors Influencing Lean Growth of Pigs" at the National Pork Producers Council's World Pork Expo in Indianapolis, IN.

Dr. John W. Erdman, Jr. gave talks related to the effects of food processing techniques on the phytochemical content of foods at meetings in Orlando, FL, Washington, D.C., and Ann Arbor, MI. He was also invited to present two symposia talks at IFT and cochaired a conference on soy consumption and prevention of chronic diseases in Mesa, AZ.

Dr. George C. Fahey, Jr. presented "Dietary Fiber: Definition and Influence on Enteric Physiology, Colonic Proliferation, and Inflammatory Mediators" at the American College of Veterinary Internal Medicine meetings in San Francisco, CA. He also discussed "The Role of Fiber in Companion Animal Nutrition" at Petfood Forum 94 held in Chicago, IL.

Dr. Keith W. Kelley gave two lectures at the Department of Pharmacology and Therapeutics, College of Medicine at the University of Florida: "Biology and Regulation of the Phagocyte NADPH oxidase" and "Growth Factor Regulation of Immune Cell Function". He presented "The Role of Central Cytokines and their Receptors in the Development of Sickness" at the Experimental Biology 94 meetings, as well as "Mechanisms of Cytokine-induced Sickness" at the Neuroendocrine Immunology Conference at New England College in Henniker, NH.

Drs. Susan Potter and Barbara Klein both presented invited talks at the International Symposium on the Role of Soy in the Prevention and Treatment of Chronic Disease in Mesa, AZ.

Professional Activities of NS Faculty

Dr. David H. Baker continues to serve on the Long-Range Planning Committee of the American Institute of Nutrition, as Associate Editor for the *Journal of Nutrition* and on the editorial board of *Annual Reviews of Nutrition*.

Dr. Karen M. Chapman serves on the selection committees for the Society for Nutrition Education Student Awards and Extension Faculty Awards. She is also a reviewer for the National Agricultural Library's NutriTopics and for the ERIC information storage and retrieval system at U of I. She continues as Graduate Coordinator for the Division of Foods and Nutrition at UIUC.

Dr. Jimmy H. Clark is a member of the editorial board of *Journal of Dairy Science*. He is active in the American Dairy Science Association, where he serves on the Program, Executive, Management Services, and Award Selection Committees. He is also member of the Board of Directors of the American Societies of Food Animal Sciences.

Dr. Sharon M. Donovan was invited to write a review article on growth factors in milk for the 1994 *Annual Reviews of Nutrition*. Her graduate student, Xiaohui Zhao, was selected as one of the 12 finalists in the Procter and Gamble-sponsored student competition at Experimental Biology '94.

Dr. Robert A. Easter serves on the editorial board of *Livestock Production Science*.

Dr. John W. Erdman, Jr. has begun a second 3-year term on the Food and Nutrition Board, Institute of Medicine, NAS, as a vice-chair of that committee. He serves as Councilor for the American Institute of Nutrition, and is the AIN representative to the Experimental Biology program committee. For IFT, he is chair of the Nominations and Elections Committee. He also serves on several editorial boards.

Dr. George C. Fahey, Jr. was appointed to the Committee on Animal Nutrition of the National Research Council, National Academy of Sciences for a three year term. He serves on the editorial boards of the *Journal of Nutrition* and the *Journal of Dairy Science*.

Dr. James Kaput was an invited investigator in the laboratory of Dr. Bev Paigen at Jackson Laboratory, Bar Harbor, Maine during the summer of 1994.

Dr. Keith W. Kelley was elected as a Councilor for the Psychoneuroimmunology Research Society. He serves on the editorial boards of *Animal Biotechnology*, *Brain, Behavior and Immunity*, *Neuroimmunomodulation*, and *Endocrinology*. He also serves on the Advisory Committee to the Office for Gerontology and Aging Studies and the Program Advisory Committee for the Beckman Institute, both at UIUC.

Dr. Barbara Klein serves on the Executive Committee of IFT and as the Associate Scientific Editor for the *Journal of Food Science*.

Dr. Shelly J. Schmidt was elected to serve on the 1994-95 Executive Committee for the Carbohydrate Division of IFT. She will be on sabbatical leave for the 1994-95 academic year and will be working at the A.E. Staley Manufacturing Co. in Decatur, IL.

Dr. Matthew Wallig serves on the editorial board of *Veterinary Pathology*. He is a member of the Processing and Co-Products Subcommittee, High Erucic Acid Development Effort, USDA and the Faculty Advisory Committee for the National Soybean Research Laboratory at UIUC.

Dr. Willard Visek continues to serve as Editor-in-Chief of the *Journal of Nutrition*.

NS Faculty Member on Sabbatical Down Under

Dr. James L. Robinson was on sabbatical for the 1993-94 academic year in Australia and New Zealand. He conducted research on the molecular biology of bovine Factor XI at the Elizabeth Macarthur Agricultural Institute in Camden on the outskirts of Sydney, Australia and he consulted on inherited disorders in cattle with the Livestock Improvement Corporation in Hamilton, New Zealand.

Faculty Grants and Research Support

Federal Grants

NIH

Dr. Keith W. Kelley has received a one-year grant to research "Hormonal Restoration of a Functional Thymus During Aging".

USDA

Dr. Karen Chapman, along with extension investigators from four other states, was awarded funds to study "Impact Indicators for Nutrition Education".

Dr. Shelly Schmidt, along with Dr. Bruce Litchfield in Agricultural Engineering, was awarded a two-year grant for "Measurement of Physical Properties of Agricultural Materials by MRI".

Dr. Matthew Wallig has received funding to research "Longterm Feeding Studies in Broiler Chicks to Evaluate the Efficacy of Crambe as a Feed Supplement".

Private Industry and Foundation Support

Dr. David H. Baker was awarded funding for "Development of Ideal Amino Acid Ratios for Chickens" from Degusse Corporation.

Dr. Jimmy H. Clark received a grant from Lonza to study "Ruminal Protection of Niacin". He also was awarded funds from Degusse Corporation for "Ruminal Protection of Methionine for Dairy Cows" and from Ajinomoto Corporation to research "Rumen Protected Methionine and Lysine for Dairy Cows".

Dr. Sharon M. Donovan, along with fellow Division members Jack Odle and Rex Gaskins, has received support from Wyeth-Ayerst Laboratories to examine "Absorptive and Immunological Responses of Piglets to Formulas Containing Intact or Hydrolyzed Protein".

Dr. Robert A. Easter has received funding to study "Vitamin A for Dogs" from Westreco, "High-Oil Corn Research" from Dupont, "Betaine for Pigs" from FINNSUGAR, and "Porcine Plasma Protein Research" from American Proteins.

Dr. George C. Fahey, Jr. was awarded a grant from Ross Laboratories for "Oligosaccharide Effects on Lower Gut Fermentation and Morphology". He also has received support from Viskase Corporation to research "Cellulose Casings as a Potential Feedstuff for Ruminants" and from The Iams Company for "True versus Apparent Digestion as Affected by Fiber Sources Fed to Ileal-cannulated Dogs".

Drs. James Kaput and Willard Visek have received funding from Ross Laboratories for "Effect of Level and Type of Fat on the Expression of Atherosclerotic Genes in Mice".

Dr. Barbara Klein has been awarded a grant from Green Giant/Pillsbury for research on "Nutrient Content of Fresh and Processed Vegetables". She has also received funds to examine "High Protein Foods for Reducing Disease Risk" from the Illinois Soybean Operating Board.

Dr. Robert H. McCusker has received funding to study "Prediction of Swine Growth Potential Using Serum Levels of an IGF-Binding Protein" from the Illinois Pork Producers Association.

Drs. Willard Visek and James Kaput have been awarded a CRADA grant from the American Institute for Cancer Research and the National Center for Toxicological Research to investigate "Caloric Restriction and Gene Expression in Agouti Mice".

Faculty Awards and Honors

(see related article below)

Dr. David H. Baker received the prestigious Morrison Award from the American Society of Animal Sciences.

Dr. Phyllis E. Bowen was the Silver Circle Award recipient for teaching excellence at UI Chicago.

Dr. Jimmy Clark won the American Feed Industry Association award for research in ruminant animal nutrition.

Dr. Robert A. Easter received the Paul A. Funk Award from the College of Agriculture, UIUC for notable contributions to agriculture.

Dr. John W. Erdman, Jr. received the Borden Award from the American Institute of Nutrition for his work on Vitamin A and Carotenoids.

Dr. Savitri K. Kamath was voted the Outstanding Dietitian of the Year from the Chicago Dietetic Association.

Dr. Barbara Klein was elected a Fellow in the Institute of Food Technologists.

Dr. Neil Shay was named one of the 1994-95 International Life Sciences Institute's Future Leaders in Nutritional Sciences.

Dr. Matthew Wallig received the Helen and Norman Levine Award for research productivity and excellence among young faculty in the College of Veterinary Medicine at UIUC.

New Research Interests of NS Faculty

As the field of nutritional sciences continues to grow, many of our faculty members have also broadened their research interests. Here is an incomplete list of new research topics:

Karen M. Chapman. Nutrition education and public policy.

Robert A. Easter. Amino acid uptake by the mammary gland.

Toshiro Nishida. HDL interconversion.

The Fruits of Our Labor

by, Joshua Bomser and Tracy Gautsch

For over 25 years, the Division of Nutritional Sciences has been a leader in human and animal nutrition research. The hard work and dedication of both the faculty and graduate students has made this possible. The excellence of our Division has not gone unrecognized, with numerous faculty members receiving national and international awards within the past four years. Seven awards are highlighted below.

Among the award recipients is Dr. David H. Baker, Professor of Animal Sciences. Dr. Baker is the 1994 recipient of the Morrison Award, the highest award given by the American Society of Animal Sciences (ASAS). This award recognizes lifetime contributions in the area of animal science research. Although Dr. Baker feels that being honored for excellent work is satisfying, he has no intentions of scaling back his research. Dr. Baker states, "In some ways, being recognized by your peers gives you added pressure ... They expect a certain level of excellence from you; so, in a sense it drives you." It is this philosophy coupled with his untiring love for research that has helped strengthen NS.

Dr. Jimmy Clark, Professor of Nutrition in the Department of Animal Sciences, is the 1994 American Feed Industry Association (AFIA) Award recipient, recognizing excellence in ruminant animal nutrition research. Dr. Clark's research has helped to clarify our understanding of protein, fat and carbohydrate utilization by dairy cows. His fundamental biological research in this area has many practical applications, including the establishment of sound dietary recommendations for dairy cows. Receiving the AFIA award is especially gratifying for Dr. Clark, because his research directly affects the feed industry. Dr. Clark comments, "It (the AFIA award) has given me a great deal of opportunity to interact with people in the feed industry; and if you get to know these people and exchange ideas with them, it can help your research."

The American Institute of Nutrition (AIN) has awarded Dr. John W. Erdman, Jr., Director of Nutritional Sciences, the 1994 Borden Award, which recognizes outstanding research on the nutritional significance of any food or food component. This award was presented to Dr. Erdman for his work on the factors affecting the absorption, bioavailability, and metabolism of carotenoids and vitamin A. Dr. Erdman feels that faculty awards not only honor the individual, but also the Division. He states: "We work hard to nominate fellow members of the Division for awards, ... because we know we have a lot of qualified people."

In addition to our honored senior faculty, several of our junior faculty members have been recognized as future leaders. The International Life Sciences Institute (ILSI) Future Leaders Award is given to promising young investigators within the nutritional and food sciences who are in their first academic position. The award consists of a two year, \$30,000 grant which allows new investigators opportunity to conduct exploratory research that might not receive funding from other sources. Since 1990, four of our faculty members have received this award.

Dr. Jack Odle, Assistant Professor of Animal Sciences, received the ILSI award in 1990, for his promising research in the development of the piglet model for the study of lipid digestion and metabolism during the early postnatal period. Dr. Odle believes that this award gave him the opportunity and confidence to actively pursue his research interests.

Dr. Sharon Donovan, Assistant Professor of Nutrition, received the ILSI award in 1991, for her work on hormonal therapy during recovery from malnutrition. Dr. Donovan states, "...winning this award gave me confidence and enabled me to do a lot of things early in my career, such as, chairing a committee and writing nutrition review articles."

Dr. H. Rex Gaskins, Assistant Professor of Animal Sciences, received the ILSI award in 1992 for his research proposal "Biochemical and Molecular Mechanisms of Diminished Insulin Secretion in Interferon- γ Treated Pancreatic Beta Cells." On the impact of this award, Dr. Gaskins comments, "This award has enabled my lab to apply for a competitive NIH grant...which we have recently received."

Dr. Neil Shay, Assistant Professor of Nutritional Biochemistry, is the most recent recipient of the ILSI award. He received this award for his proposal "Gene Expression in the Rat Brain During Appetite Regulation and Zinc Deficiency Induced Anorexia." Dr. Shay feels that this award will allow him to produce the preliminary data necessary to receive additional funding for his research.

Recent Retirement

Dr. Arthur J. Siedler has recently retired from his position at the University of Illinois. He will, however, continue to participate in Division activities in emeritus status.

External Advisory Committee

Each year, the Division of Nutritional Sciences is evaluated by an External Advisory Committee. Committee members are selected by the Division from industry and academe around the nation to provide outside viewpoints on the quality and emphasis of the NS program. We would like to thank the members for their time and effort in assisting Nutritional Sciences to continue to improve its high caliber program. Here are the 1993-94 academic year committee members.

Dr. David Anderson
Senior Research Scientist
Lilly Research Laboratories

Dr. Sandra J. Bartholmey
Manager of Nutrition
Gerber Products Company

Dr. Myrtle Brown
Professor of Biochemistry
Professor of Nutrition
Virginia Polytechnical Institute (Retired)

Dr. Robert J. Collier
Dairy Research Director & Senior Fellow
Monsanto Agricultural Company

Dr. David A. Cook
Vice President, Science & Technology
Mead Johnson Nutritional Group

Dr. Cecile Hoover Edwards
Professor of Nutrition
Howard University

Dr. Arthur L. Hecker
Director, Medical Nutrition
Ross Laboratories

Dr. Doris Lennon-Thompson
Associate Director, Nutrition & Health Sciences
Kraft General Foods

Dr. Eric Lien
Director, Nutritional Research
Wyeth-Ayerst Laboratories

Dr. Kenneth T. Smith
Associate Director
Food & Beverage Technical Division
The Procter & Gamble Company

Dr. Gilbert Leveille
Vice President, Research & Technical Services
Nabisco Biscuit Company(Ad Hoc)

Honorable Helen Satterthwaite
Illinois State Representative(Ad Hoc)

The new members for the 1994-95 academic year are:

Dr. Guy H. Johnson
Director of Nutrition
The Pillsbury Company

Dr. Richard G. Shields, Jr.
Director, Pet Nutrition
Quaker Oats Company

NS Welcomes New Students

Fifteen new graduate students joined the Division this past year. Hwa Young Baik (B.S., Foods and Nutrition, Seoul National University) is working towards her Master's degree with Dr. Susan Potter. Jo Ann Baum (B.S., Dietetics, UIUC) is also a M.S. candidate with Dr. Susan Potter. Stephen Clarke (B.S., Nutrition, University of Oklahoma Health Science Center) is studying for a M.S. with Dr. Elizabeth Jeffery. Edward Kao (B.S., Cell and Structural Biology, UIUC) is a Master's student with Dr. Tim Garrow. Pei-Juei Lee (B.S., Agricultural Chemistry, National Taiwan University) is working towards her M.S. under the supervision of Dr. Ed Perkins. Christopher MacDonald (B.S., Chemistry and Biology, UIUC) is studying for his M.S. with Dr. Keith Singletary. Amy Moore (B.S., Nutrition and Dietetics, Northern Illinois University) is a Master's student under the direction of Dr. John Erdman. Eric Park (B.S., Biochemistry, UIUC) is a M.S. student with Dr. Willard Visek. Yoo-Kyoung Park (M.S., Foods and Nutrition, Yonsei University, Korea) is studying for her Ph.D. with Dr. Sharon Donovan. Kavita Patel (B.S., Biology, University of North Carolina at Charlotte) is working towards her M.S. with Dr. David Baker. Amy Randall (B.S., Foods and Nutrition, UIUC) is a M.S. student with Dr. Neil Shay. Ping Sun (B. Med., Public Health, Shanghai Medical University) is studying for his Ph.D. with Dr. Bahram H. Arjmandi. Hong Yu Teng (M. Med., Surgery, Beijing Medical University) is a Ph.D. candidate with Dr. Susan Potter. Lin Xi (Ph.D., Animal Nutrition, Beijing Agricultural University) is studying for his Ph.D. under the supervision of Dr. Jack Odle. Wen Yan (B.S., Medical Science, The Fourth Military Medical University, China) is working towards her Master's degree under the supervision of Dr. Keith Singletary.

Class of 1993-1994

The Division granted advanced degrees to 11 students during academic year 1993-94. Some are working in industry, while others have chosen to stay in academic life as either professionals or students continuing with their education. We wish them continued success and fulfillment in their efforts!

October 1993

Ryowon Choue Dokko (Ph.D.) - Assistant Professor, Department of Food and Nutrition, Kyung Hee University, Seoul, Korea.

Jennifer Fisher (M.S.) - Doctoral candidate, Penn State University, University Park, PA.

Theo van Kempen (Ph.D.) - Product Development Coordinator in the Agricultural Research Division, American Cyanamid Company, Princeton, NJ.

Courdjo Lamboni (Ph.D.) - Assistant Professor, Biochemistry and Nutrition, Universite du Benin, Lome, Togo.

January 1994

Patti Kloss (M.S.) - Research Specialist, Department of Medicinal Chemistry and Pharmaceutical Sciences, University of Illinois at Chicago.

Catherine Peterson (Ph.D.) - Postdoctoral Fellow, University of Wisconsin, Madison, WI.

May 1994

Chris Poor (Ph.D., M.D.) - Resident, Department of Family and Community Medicine, University Hospital and Clinic, University of Missouri, Columbia, MO.

Minnie McNary (Ph.D.) - Postdoctoral Fellow, University of North Carolina, Chapel Hill, NC.

Kyung-Hee Hwang (Ph.D.) - family leave.

Greg Sunvold (Ph.D.) - Research Nutritionist, The Iams Company, Lewisburg, OH.

Two former NS Ph.D. awardees completed their M.D. degrees at UIUC and have moved on to residencies: George Bark and Alexandra Adams. In addition, former M.S. degree candidate, Julia Winter, completed her M.D. at UIUC.

NSGSA Activities

The 1993-94 academic year was both active and productive for the Nutritional Sciences Graduate Student Association (NSGSA). Officers Brent Flickinger (co-chair), Joan Ham (co-chair), Sean Adams (treasurer), and Marcia Monaco (secretary) guided many NSGSA projects in Summer and Fall 1993. NSGSA hosted the Fall 1993 new student reception and presented the third annual Faculty Award to Dr. John Erdman, Jr., in recognition of his dedication to graduate education and support of student activities. At the end of the Fall semester new officers were elected: Joan Ham (co-chair), Joy Campbell (co-chair), Jason Emmert (treasurer), and Mary Larson (secretary). A joint holiday party with the Department of Food Science and the Division of Foods and Nutrition was held to bring 1993 to an end.

The third annual student-faculty Nutrition Bowl was held in early Spring 1994. Four teams, each comprised of one faculty member and four graduate students, competed on a wide range of nutrition-related topics. The winners were Dr. Sharon Donovan, Marc Dicklin, Heather Muir, Rick Staack, and Greg Sunvold. Nutrition Symposium '94 was held just prior to the Experimental Biology meeting in April. The symposium, an expansion of previous Mock FASEB events, was an opportunity for graduate students to share their research not only with students and faculty from the Division, but also with other departments at UIUC and neighboring universities, as well as physicians and dietitians in the community. Dr. Judith Stern from the Departments of Nutrition and Internal Medicine, University of California at Davis gave the keynote address: "The Women's Health Initiative: Nutritional Perspectives". Graduate students Jason Emmert, Mary Larson, Qiang Liu, Greg Paul, Tia Rains, and Jin Rong Zhou were presented travel awards by the Division for their outstanding poster presentations at Nutrition Symposium '94.

Graduate Student Presentations

Numerous graduate students in Nutritional Sciences presented their research at many scientific meetings during the 1993-94 academic year.

Experimental Biology 94

Sean Adams - Plasma Acetate, Impaired Ketogenesis, and Chain-shortening of C8:0 in Day Old Pigs Fasted from Birth.

Manuel Baldeon - Pancreatic β -cell Sensitivity to the Inflammatory Cytokine, IFN γ is Restricted to Glucose-regulated Events and a Function of Metabolic Activity.

Jason Emmert - Zinc Stores Delay Onset of Zinc Deficiency Symptoms in the Chicken.

Mary Larson - Dietary Protein Source during Neonatal Development Affects Lipid Metabolism.

Guixiang Li - Neuropeptide Y Gene Expression in the Rat during Zinc-deficiency-induced Anorexia.

Qiang Liu - Competitive RT-PCR to Measuring IGF-I Transcripts in Bone Marrow Cells.

Marcia Monaco - Lactating Rat Serum and Milk Insulin Concentrations.

Greg Paul - Influence of Pre-exercise Meals on Energy Metabolism and Plasma Tryptophan.

Tia Rains - Macronutrient Preference during Zinc Deficiency - Anorexia.

Aparna Reddy - Glucagon Regulation by Amino Acids.

Jin Rong Zhou - Effect of Food Matrix and Heat Treatment on the Bioavailability of β and α -carotene from Carrots fed to Ferrets.

American Society of Zoologists

Sean Adams - Acetogenesis Replaces Ketogenesis during β -oxidation in Neonatal Pigs.

American Dairy Science Association/American Society for Animal Sciences

Jason Emmert - Protein Quality Assessment of Soy Products, Pork Loin, and Casein.

Functional Foods for Health Retreat

Mary Larson - Dietary Protein Source during Neonatal Development Affects Lipid Metabolism.

International Symposium on the Role of Soy in the Prevention and Treatment of Chronic Disease

Frantzie Balmir - Soybean Isoflavones Influence Serum Lipid Levels in Rats.

Rick Staack - Effects of Isoflavonoids from Soy on Rat Hepatic Drug Metabolizing Enzymes.

International Conference on Qualitative Health Research

Mimi Chan - Using Focus Groups to Develop Effective Nutrition Education Material Targeting Calcium Intake.

Joan Ham - From Theory to Practice: a Case Study in Diabetes Education.

Society for Nutrition Education

Mimi Chan - Women's Attitudes about Calcium Intake and Calcium-related Educational Materials.

Joan Ham - Use of a Weighted-Intent Model to Predict Dietary Adherence in Elderly Diabetic Men.

WSAVA Congress, Berlin, Germany

Jill Cline - Riboflavin Requirement of the Adult Dog at Maintenance.

NS Graduate Student Awards

Twice each academic year, the Division presents awards to support travel by students to attend scientific meetings. In Fall 1993 the following students received grants: Manuel Baldeon, Marc Dicklin, Jason Emmert, Mary Larson, Guixiang Li, Minnie McNary, Tia Rains, Aparna Reddy, Joan Rokusek, and Jin Rong Zhou. Spring 1994 travel awards were given to: Joan Ham, Mimi Chan, and Maoxin Wu.

The Division also presents awards for excellence in student research. The 1994 recipients were Jason Emmert, Mary Larson, Guixiang Li, Tia Rains, Aparna Reddy, and Joan Rokusek.

Fellowships and Scholarships

Sean Adams: University of Illinois Graduate College Fellowship;

Manuel Baldeon: International American Foundation Fellowship;

Frantzie Balmir: National Heart, Lung, and Blood Institute, NIH;

Sean Barnes: Illinois Minority Graduate Incentive Program Fellowship;

Joy Campbell: Jonathan Baldwin Turner Fellowship;

Jason Emmert: Jonathan Baldwin Turner Fellowship;

Deshanie Ganessunker: South African Education Program Scholarship;

Ziwen Guo: University of Illinois Graduate College Fellowship;

Qiang Liu: University of Illinois Graduate College Fellowship;

Minnie McNary: National Institute of Alcohol, Alcoholism and Drug Abuse, NIH;

Elizabeth Paisley: Nabisco Foods Group Fellowship

Students Attend National Policy Conference

In April, the Division sponsored Joshua Bomser, Tracy Gautsch, Susan Kandl, and Joan Rokusek to participate in the International Life Sciences Institute's National Nutrition Policy Seminar, which is held each spring in Washington, D.C. Dr. Barbara Klein accompanied them. The group spent several days learning about national food and nutrition policy and discussing policy issues with representatives from federal agencies, congressional committees, and lobbying groups. They were fortunate to meet directly with IL Representative Dick Durbin.

Graduate Student Notes

Mary Larson's research on protein's effects on lipids in piglets was reviewed in the biomedical column of Science News.

Mimi Chan was awarded a travel grant from the Society for Nutrition Education to attend the annual meeting in Portland, OR.

Two NS students, Mary Larson and Rick Staack, were sponsored by the Illinois Soybean Association and the Illinois Soybean Checkoff Board to attend the first International Symposium on the Role of Soy in the Prevention and Treatment of Chronic Disease.

Joan Ham was awarded a small project research grant from the Office of Gerontology and Aging Studies for her research on improving dietary adherence in elderly diabetics.

Tia Rains was awarded the Avery Brundage Scholarship for amateur athletics.

Several NS students were married in 1994. Congratulations to Marcia Monaco, who married Art Siegel in May; to Heather Muir, who married Jeffrey Spanbauer in May; and to Joy Campbell, who married Richard Heuer in July.

Alumni News

1969

Mary Jacob (Ph.D.) continues as a Professor in the Department of Home Economics at California State University in Long Beach.

1970

G. Harvey Anderson (Ph.D.) is a Professor of Nutritional Sciences, Physiology, and Medical Sciences at the University of Toronto, Toronto, Canada. He serves as Director of the Program in Food Safety.

1972

Ifeyanyi Justin Arinze (Ph.D.) is Professor and Chairman in the Department of Biochemistry at Meharry Medical College in Nashville, TN. In 1994, he was awarded the Outstanding Basic Sciences Professor in the School of Medicine. He will serve on the editorial board of the *Journal of Biological Chemistry* through 1998.

Race L. Kao (Ph.D.) is Professor of Surgery and Physiology at East Tennessee State University in Johnson City. He also holds the C.H. Long Chair of Excellence for Surgical Research. He is listed in *Who's Who Worldwide* and in *Who's Who in the South and Southeast*.

1974

Nalini N. Vilas (Ph.D.) is a Clinical Assistant Professor and Nutrition Specialist in the Department of Nutrition and Dietetics at the University of Illinois at Chicago.

1975

Kailash Mathur (Ph.D.) is Professor and Advisor to the Nutritional Sciences Graduate Program at South Carolina State University in Orangeburg. He is also Adjunct Professor of Nutrition at the Medical University of South Carolina in Charleston. He serves as a member of the Advisory Board for the Nursing Division at Orangeburg Calhoun Technical College in Orangeburg and as a trustee of the South East Consortium for International Development.

Frank H. Morris (M.S.) continues as an activist for environmental and nutritional concerns in Philadelphia, PA.

1976

Guy Johnson (Ph.D.) continues work as Director of Nutrition for Pillsbury in Minneapolis, MN. During the past year, he coordinated the enormous task of implementing NLEA guidelines for 2600 Pillsbury product labels (one every 15 business minutes). In January 1995, he will assume the Chair of International Life Sciences Institute's Food Nutrition and Safety Committee. One of his highlights in 1993 was a return to Champaign to give a seminar to the Division.

Kathleen Koehler (Ph.D.) continues as Associate Professor in Nutrition at the University of New Mexico in Albuquerque. She was a member of the planning committee for the Society for Nutrition Education annual meeting in Portland, OR in July, 1994. She continues to serve on the editorial board of the *Journal of Nutrition Education*. A brief account of her research appeared in *Nutrition Reviews* in August, 1994.

Meena Nandi (Ph.D.) is a Senior Associate on the National Research Council at the National Air and Space Administration's Ames Research Center in Moffett Field, California.

Keun S. Shin (Ph.D.) continues as Adjunct Professor in the Department of Biology at the Virginia Commonwealth University in Richmond.

1978

Steven K. Clinton (Ph.D.) is an Associate Professor at the Dana-Farber Cancer Institute of the Harvard Medical School in Boston, MA. He serves on the editorial board of the *Journal of Nutrition*. He has begun an exciting collaboration with Dr. Erdman's lab at UIUC concerning carotenoids and prostate cancer.

W. James Croom (Ph.D.) continues as Professor of Animal Science and Physiology at North Carolina State University in Raleigh. His daughter, Blythe Anne, was born October 8, 1993.

Brian R. Schricker (Ph.D.) works as Senior Research Scientist at Mallinckrodt Veterinary Clinic in Mundelein, IL.

1979

Larry Lawson (Ph.D.) works as a Research Scientist at Murdock Madaus Schwabe in Springville, Utah.

Dan Schaefer (Ph.D.) continues as Professor of Meat and Animal Science at the University of Wisconsin in Madison. He spoke on dietary vitamin E and beef quality at the Midwest American Society of Animal Sciences in Des Moines, IA, Experimental Biology '94 in Anaheim, CA, and the Istituto Delle Vitamine Symposium in Bologna, Italy.

1980

John E. Bauer (Ph.D.) is Mark L. Morris Professor of Nutrition in the College of Veterinary Medicine at Texas A&M University in College Station. He is the immediate past President of the American College of Veterinary Nutrition Specialty Board. He serves on the editorial boards of *Journal of Veterinary Nutrition*, *Veterinary Clinical Nutrition*, *Waltham Forum*, *American Veterinary Medicine Association*, and *A.D.C.S. Press*. He is also a charter diplomat in the American College of Veterinary Nutrition.

Edward A. Ulman (Ph.D.) is the President of Research Diets in New Brunswick, NJ. He and his employees are celebrating the 10th anniversary of the founding of Research Diets and would like to thank all Illinois alumni for their support.

1981

Tom Edes (M.S.) is Chief of Geriatrics and Extended Care at the Harry S. Truman VA Hospital and Associate Professor of Medicine at the University of Missouri School of Medicine in Columbia, MO.

1982

Gilbert Boissonneault (Ph.D.) continues work in the Department of Clinical Sciences at the University of Kentucky in Lexington. He chaired two sessions at Experimental Biology '94 on "Lipoproteins and Cholesterol: Specific Fatty Acids and Genetics". He was also the resident supervisor for the 1994 Summer Student Research Program at the Jackson Laboratory in Bar Harbor, Maine.

Lisa A. Reich (M.S.) continues as Senior Product Manager at the Bard Cardiopulmonary Division of C.R. Bard in Billerica, MA.

1983

Edward J. Basgall (Ph.D.) continues as Assistant Professor in the Department of Cellular Biology and Anatomy at the Medical College of Georgia in Augusta.

1984

JoAnn Daehler-Miller (M.S.) continues as a nutrition consultant with the Minnesota Department of Health WIC Program. She serves on a committee that is revising the Twin Cities District Dietetic Association Pediatric Diet Manual.

Barbara A. Kochanowski (Ph.D.) continues work as a Product Development Manager of Gastrointestinal Products at Procter and Gamble in Cincinnati, OH. She is serving a two-year term on the External Advisory Board for the Nutrition Program at Rutgers University in NJ. She and her husband, Ken Poirier, welcomed their daughter, Leann Marie, on March 11, 1994.

Kenneth Poirier (Ph.D.) began his new position as Gastrointestinal Regulatory Affairs Manager at Procter and Gamble in November, 1993. He and his wife welcomed their first child, Leann Marie, home in March.

1985

Luiz Antonio Dos Anjos (M.S.) is Professor in Nutrition in Public Health at Universidade Federal Fluminense in Rio de Janeiro, Brazil. His third daughter, Fernando Couto Anjos, was born on April 14, 1993.

1986

Chris Hatlestad (M.S.) has begun work in family practice at the Columbia Valley Medical Group in Longview, WA.

Lynn Janas (Ph.D.) continues work as Clinical Research Manager of Pediatric Nutrition Research and Development at Ross Laboratories in Columbus, OH. Her daughter, Caroline Jane Horswill, was born December 10, 1993.

Anne M. Smith (Ph.D.) continues work as Assistant Professor in the Department of Human Nutrition and Food Management at the Ohio State University in Columbus.

1987

Yu-Tsyr Li (M.S.) continues as Senior Research Scientist at Advanced BioAnalytical Services in Ithaca, NY. She is a member of the American Chemical Society and the American Society of Mass Spectrometry.

1988

Ronald D. Cotterel (M.S.) continues as Assistant Clinical Professor in the Department of Family Practice at the School of Medicine at the University of California, Davis. He also works as a physician in the Family Practice Medical Group. He serves as Section Chair on the Scientific Advisory Panel to the Section on General and Family Practice for the California Medical Association.

Kevin L. Fritsche (Ph.D.) was promoted to Associate Professor in Animal Sciences at the University of Missouri in Columbia in 1994. He has served as the Director of Graduate Studies for the Graduate Nutritional Sciences Program since 1993 and has been elected to the editorial board of the *Journal of Nutrition*. His fourth child, Elizabeth, was born on March 19, 1994.

Shelley McGuire (M.S.) has begun work as a Research Associate in the Division of Nutritional Sciences at Cornell University in Ithaca, NY. She completed her Ph.D. at Cornell this past year and is searching for a position in the Midwest. She and her husband, Mark, welcomed their second daughter, Grace Meredith, home on February 5, 1994.

Melissa Hendrix Olken (Ph.D.) is Assistant Professor in the Department of Internal Medicine at St. Joseph Mercy Hospital in Ann Arbor, MI. She also has an adjunct position in the Human Nutrition Program at the School of Public Health, University of Michigan.

Melanie Shuran (Ph.D.) continues as Professor and Chair of the Department of Nutrition and Clinical Dietetics at the Finch University of Health Sciences at the Chicago Medical School.

Ray Yedinak (M.S.) continues as Manager of Quality and Technical Services at Viobin Corporation in Monticello, IL. His second daughter, Emily Kathryn, was born this past year.

1989

Eugene S. Olsowka (Ph.D.) has relocated to the Institute of Pathology in Saginaw, MI, where he works as a pathologist and as the Director of Chemistry.

1990

Samuel Ejadi (M.S.) has completed his second year of medical school at Midwestern University in DuPage, IL. He was awarded a 1994 Memorial Sloan-Kettering Cancer Center preclinical fellowship to spend the summer in New York City, working on the development of genetically engineering vaccines for use in immunological treatment of patients with cancer.

Hsi-chiang Lin (Ph.D.) continues work in molecular and cellular toxicology at HSPH in Massachusetts.

1991

Jana Bryant (M.S.) has begun work as Manager of Clinical Research at International Medical Technical Consultants of Lenexa, Kansas.

Alyce Fly (Ph.D.) continues as Assistant Professor of Nutrition at Indiana University in Bloomington. She is serving as secretary for the State of Indiana Nutrition Council from 1994-96. She presented work at Experimental Biology '94 on "Iron Bioavailability in Milk" and at IFT on "Soybean Protein Isolate in Cookies".

Lesley Helyar (Ph.D.) began her new positions as Research Scientist at the Maine Toxicology Institute and as Allied Scientist at the Eastern Maine Medical Center, both in Bangor.

Matthew Kuchan (Ph.D.) began a new job as Clinical Research Associate in the Ross Products Division of Abbott Labs in Columbus, OH. His wife, Sandy, gave birth to their third child, Jesslyn Reilly Johanna on January 3, 1994.

Tracy Tasker (M.S.) completed her M.S. in Clinical Nutrition at Rush University and has begun work as a clinical dietitian at the Midwestern Regional Medical Center in Zion, IL.

Ann M. Ward, formerly Trusk, (M.S.) has begun work as a nutritionist at the Fort Worth Zoo in Fort Worth, TX. She was married in November, 1993.

1992

James Burns (M.S.) is a Nutritionist for Near North Health Services Corporation in Chicago, IL, where he is counseling participants in the Women Infants and Children Program and developing computer-based educational materials.

Connie Krashoc (M.S.) continues as Clinical Nutritionist at the University of Tennessee Medical Center in Knoxville.

Stacy Scardefield (M.S.) continues as a Clinical Research Associate for Hoffmann-LaRoche Pharmaceutical Company in New Jersey.

Gregory Wibert (Ph.D.) is a Research Scientist at Mead Johnson in Evansville, IN.

1993

Alexandra K. Adams (Ph.D.) is Medical Resident in Family Practice at St. Mary's Hospital, University of Wisconsin in Madison. She received the Upjohn Award for Excellence in Obstetrics and Gynecology at the U of I College of Medicine commencement in 1994. She gave birth to Duncan Edwin on December 31, 1993.

Lee Alekel (Ph.D.) is Assistant Professor in the Department of Human Nutrition and Dietetics at the University of Illinois in Chicago. She received funding from the Campus Research Board and the Center for Research on Women and Gender Seed Grant at UI Chicago to support research on bone mass in ethnic groups of premenopausal women.

Ryowon Choue Dokko (Ph.D.) is Assistant Professor in the Department of Food and Nutrition at Kyung Hee University. She is Director of Nutritional Research at Sewon Health Promotion Clinic.

Yolanda Goode (M.S.) is an Expanded Food and Nutrition Education Program agent with Cornell Cooperative Extension in Ostego county, New York.

Theo van Kempen (Ph.D.) works as Product Development Coordinator in the Agricultural Research Division of American Cyanamid Company in Princeton, New Jersey.

Courdjo Lamboni (Ph.D.) is Assistant Professor in the Department of Biochemistry and Nutrition at the University du Benin in Lome, Togo.

Nicole de Leeuw (M.S.) is a Ph.D. candidate in molecular biology at the Department of Medical Microbiology, University Hospital in Nymegen, The Netherlands.

Julia Winter (M.S.) is Pediatrics Resident at Children's Hospital in Los Angeles, CA. She received the Richardson Fellowship for foreign study, which she utilized to work at King's College Hospital in London.

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