

PROCEEDINGS OF THE SEVENTY-SECOND ANNUAL MEETING OF THE AMERICAN SOCIETY FOR NUTRITION

SAN DIEGO CA
APRIL 5-9, 2008

EXECUTIVE BOARD MEETING

The Executive Board American Society for Nutrition (ASN) met on Friday, April 4, 2008. Highlights of Board actions are as follows:

Approved unanimously the membership committee actions

Received and approved the Treasurer's report

Received the Tellers' report and confirmed the Executive Board composition for 2008-2009: *President*: James Hill; *Past President*: Joanne Lupton; *Vice President*: John Beard; *Vice-President-Elect*: Robert Russell; *Treasurer*: Mary Frances Picciano; *Secretary*: Teresa Davis; *RIS Representative*: Cindy Davis; *International Nutrition Council Representative*: Laura Caulfield; *Medical Nutrition Council Representative*: Tom Ziegler; *Nutritional Sciences Council Representative*: Susan Hutson

Requested the Professional Nutrition Education subcommittee to present a detailed report of planned activities and expansion by September 1, 2008.

SCIENTIFIC AND SPECIAL SESSIONS

Six corporate societies of the Federation of American Societies for *Experimental Biology* (FASEB) met in San Diego CA for the *Experimental Biology 2008* meeting. ASN programmed the following: 19 major symposia, 3 conferences, 3 controversy sessions, 6 special sessions, 3 lectures, 1 workshop, 45 oral sessions (from minisymposium submissions), and 99 poster sessions [>900 posters were scheduled] for a total of 179 sessions. We received 1326 abstracts for programming into our oral and poster sessions related to the minisymposia topic categories. We received 134 latebreaking abstracts which were programmed on Wednesday, April 9. The following sessions, reviewed by the Scientific Program Committee were presented:

Symposia

ASN Professional Development Symposium: From Molecules to Consumers: Dietary Guidelines Evolving to Personalized Nutrition. Chair: D. Heber

Emerging Therapies in Intestinal Failure: Growth Factors and Beyond. Chair: K. Tappenden

The Emerging Interplay Among Muscle Mitochondrial Function, Nutrition and Disease. Chair: K. Short

Presidential Symposium: Leptin: Weight Management and Beyond. **Chairs:** J. Lupton and J. Friedman

Hepcidin Regulation of Iron Transport. **Chair:** M. Wessling-Resnick

Methyl Donors, Iodine and DHA – Is Maternal Supplementation Beneficial? **Chair:** S.E. Carlson

Nutrition Education for the Poor and Underserved. **Chair:** S. Gerrior

Infant and Young Child Iron Deficiency and Iron Deficiency Anemia in Developing Countries: The Critical Role of Research to Guide Policy and Programs. **Chair:** C. Lutter

Public Information Committee: Nutrition Profiling: Global Policies and Perspectives. **Chair:** G. Miller

Food, Nutrition, Physical Activity and the Prevention of Cancer: A Global Perspective. **Chair:** C. Davis

Advances in Understanding of the Biological Role of Biotin at the Clinical, Biochemical, and Molecular Level. **Chair:** D.M. Mock

Achieving Evident-Based Approaches to Nutrition. **Chairs:** D. Bier and B. Lyle

History of Nutrition: Discovery and Prevention of Micronutrient Deficiencies. **Chair:** L.H. Allen

A Stimulating Conversation: Dietary Factors, Epithelial Cells and the Immune System in Carcinogenesis. **Chairs:** N. Hord and S. Percival

Vitamin D and Health in the 21st Century: Research Needs and Tools for Researchers. **Chair:** M.F. Picciano

Food Addiction: Fact or Fiction? **Chairs:** R. Corwin and P. Grigson

Is It Time for Mandatory Vitamin B12 Fortification of Flour? **Chair:** R. Green

Maternal and Child Mental Health: Role of Nutrition. **Chair:** U. Ramakrishnan

Infant Feeding and the Development of Obesity: What Does the Science Tell Us? **Chair:** L. Adair

Lectures

*The EV McCollum International Lecture: The World is Fat: Understanding the Patterns of the Nutrition Cycle. **Lecturer:** B.M. Popkin*

*The Atwater Lecture: Nutrients, Endpoints and the Problem of Proof. **Lecturer:** R.P. Heaney*

*The Kellogg International Prize Lecture. Iron deficiency and Translational Research: Going from One Mud Puddle to Another. **Lecturer:** J. Beard*

Conference

*11th Annual ILSI North America Special Conference: Functional Foods for Health. **Chair:** J.A. Milner*

*CARIG Conference. **Chairs :** E. Johnson*

*11th Annual PhenHRIG Conference and Meeting: Genomics and Proteomics in Flavonoid Research. **Chair:** M. Gross*

Workshop

*Public Information Committee: Communicating Nutrition and Food Safety Risks: Methyl Mercury, Trans Fat, E. Coli, Oh My! **Chair:** N. Wellman*

Controversy

*Malnutrition Syndromes. **Chair:** G. Jensen*

*Carbohydrate Restriction as Treatment for Diabetes and Metabolic Syndrome. **Chairs:** J. Volek and R.D. Feinman*

*Dietary PUFA and the Aging Brain: Food for Thought. **Chair:** J. Whelan*

Special Sessions

*Nutrition Research Advocacy for the 21st Century: Strategies to Enhance NIH Funding. **Moderators:** S. Hutson and P. Stover*

*Emerging Science on Sodium and Children. **Chair:** I. Laquatra*

*Clinical Emerging Leader Award Oral Competition. **Chair:** K. Tappenden*

*Procter & Gamble Graduate Student Oral Competition. **Chair:** J.F. Gregory III*

Internships and Research-Abroad Experiences for Graduate Students of Nutrition. **Chair:** D. Doane

Food and Nutrition Board Update: Dietary Reference Intakes: New Challenges. **Chair:** L. Meyers

On Saturday afternoon, April 5, the ASN/Procter & Gamble Graduate Student Research Awards oral competition session was held. Eleven winners of the graduate student abstract competition, selected in December of 2007, presented their papers. The session was chaired by Jesse Gregory, one of the seven members of the ASN P&G Graduate Student Research Awards Committee. Travel awards of \$750 were given to the 11 winners of the abstract competition, and additional awards of \$500 were presented to the three winners of the oral competition. The eleven winners of the abstract competition were:

Asma Ejaz, Tufts University
Advisors: Mohsen Meydani

Jeremy Goforth, University of Wisconsin at Madison
Advisor: Richard Eisenstein

Qian Jia, Texas A&M University
Advisor: Robert Chapkin

Rulang Jiang, University of California at Davis
Advisor: Bo Lonnerdal

Yan Jiang, Purdue University
Advisor: James Fleet

Albert Karlsson, University of North Carolina at Chapel Hill
Advisor: Melinda Beck

Wooki Kim, Texas A&M University
Advisor: Robert Chapkin

Yunkyoung Lee, The Pennsylvania State University
Advisor: John Vanden Heuvel

Yalin Liao, University of California at Davis
Advisor: Bo Lonnerdal

Kimberly Paulhill, Texas A&M University
Advisor: Nancy Turner

Manuel Roqueta-Rivera, University of Illinois at Urbana Champaign
Advisor: Manabu Nakamura

The three winners of the oral competition were: Asma Ejaz, Wooki Kim, and Yalin Liao

Also at the awards ceremony at *EB2008*, Milton Sunde presented to Ryan Dilger, Postdoctoral Researcher at the University of Illinois at Urbana-Champaign, the **Milton L Sunde Award** which is given, for publication in *The Journal of Nutrition*, for outstanding experimental, applied or fundamental research in nutrition that uses an avian species. This award was presented for Dr Dilger's three manuscripts published in *The Journal of Nutrition* in Vol. 137, 2007: pp 331-338; August, pp 1868-1873; and October, pp 2224-2228.

Also on Saturday in the afternoon the **Clinical Emerging Leaders Award** competition was held. The five finalists in this year's competition were:

John Apolzan, Purdue University
Advisor: Wayne Campbell

Bradley Ferguson, University of North Carolina at Greensboro
Advisor: Ron Morrison

Aki Konomi, Seitoku University
Advisor: Katsuhiko Yokoi

Jordan Mills, University of Wisconsin at Madison
Advisor: Sherry Tanumihardjo

Julia Wong, University of Toronto
Advisor: David Jenkins

Bradley Ferguson, from the University of North Carolina at Greensboro, was the overall winner of the Clinical Emerging Leaders award competition.

During the **International Nutrition Council** Business Meeting and Social events on Monday, April 7, **John Beard**, the winner of the Kellogg International Nutrition Research Award delivered his award lecture. The following student prize winners were announced also:

Emmanuel K Aklamati, University of California at Davis
Advisors: Kenneth Brown

Tuan T Nguyen, University of North Carolina at Chapel Hill
Advisor: Barry Popkin

Christine Stewart, John Hopkins University Bloomberg School of Public Health
Advisor: Parul Christian

Emmanuel Aklamati from the University of California at Davis received the overall award.

This year, once again, the ASN, in concert with its Graduate Nutrition Education Committee, administered the Predoctoral Fellowship Program. 50 proposals were submitted for this competition. The seven available fellowships (each for \$5000) were awarded as follows:

Dolores Fernandez Doane from the University of Illinois at Urbana-Champaign, (*Advisor: J Lee Beverly*) won the **Cadbury Schweppes Predoctoral Fellowship** for her proposal: *Alteration of the hypothalamic melanocortin system by high protein/low carbohydrate diets to induce satiety and aid weight loss* [**The Cadbury Schweppes Fellowship was awarded for the first time in 2008**]

Jessica Ellis from the University of North Carolina at Chapel Hill (*Advisor: Rosalind Coleman*) received the **Cargill Fellowship** for her proposal: *The role of acyl-CoA synthetase isoform-1 in white adipose tissue and heart*

Ryan Grant from the University of Illinois at Urbana-Champaign (*Advisor: Kelly Swanson*) was awarded the **Wyeth Consumer Healthcare Fellowship** for his proposal: *Modulation of skeletal muscle genes during the development of obesity*

Suzanne Judd from Emory University (*Advisor: Vin Tangpricha*) is the recipient, in 2008, of the **Kraft Foods Fellowship** for her proposal: *Vitamin D treatment and hypertension in African Americans*

Erik Albert Karlsson from the University of North Carolina at Chapel Hill (*Advisor: Melinda Beck*) received the **Wrigley Science Institute Fellowship** for his proposal: *Obesity, influenza and cell-mediated immune memory*

Justin Smolinski from the Ohio State University (*Advisor: Steven Clinton*) is this year's recipient of the **McNeil Nutritionals Fellowship** for his proposal: *Calcium and vitamin D interactions in prostate carcinogenesis*

Ying Su from the University of Arkansas (*Advisor: Rosalia Simmen*) received the **Gerber Foundation Fellowship** for her proposal: *Dietary effects on mammary gland development and breast cancer susceptibility*

Denise Walker Lasker from the University of Illinois at Urbana-Champaign (*Advisor: Donald Layman*) received the **Mars, Inc.** fellowship for her proposal: *Dietary carbohydrate threshold in peripheral tissue and glucose metabolism*

BUSINESS MEETING

The annual business meeting of the Society was held on Monday, April 7, 2008 with President Joanne Lupton presiding. Dr Lupton welcomed the membership to the 72st business meeting of the American Society for Nutrition.

The agenda was adopted.

By voice vote the membership approved the Proceedings of the 71th Annual Meeting, published in *The Journal of Nutrition*, September 2007 (Vol. 137, No. 9)

President's Address- Joanne Lupton

Thank you very much John and we are honored and pleased to have John as our Executive Officer as you will see as I go through my report today. I'd like to do three things; there are three focus points to my talk today. There are three points of focus in my talk this evening: first to recognize the people who have done all the work—The Executive Board and the staff in particular and I will be introducing them. They are sitting up here right now. And then I would like to report on the four action items I delineated last year and tell you the progress on each of the areas. Then I would like to report on those areas where ASN has really advanced since last year and give credit to the people who are responsible for that advancement. So first, let me introduce to the Executive Board. I can't say enough about this Board. Each one of the members has his/her own individual philosophy but they all come together to support ASN. None of these need introductions but they deserve them anyway: Jim Hill, who is Vice president, incoming President. You'll be hearing from him later in the program; our Vice-President Elect, John Beard, who will now become the Vice President and then President after Jim Hill. Jim Hill becomes President on June 1, 2008. Our Past President, Stephanie Atkinson, who did such a terrific job that she put us in a position to start off this year; our Secretary Teresa Davis and you will be hearing from her in just a few minutes after I finish my talk; our Treasurer, Mary Frances Picciano; and the representatives of our Councils. You may or may not know that when you elect the chair of your Council, you are putting that person onto the Executive Board. That may not have been clear to everyone but you can see the importance of the Councils and the RIS groups right on our Executive Board. Our Council chairs representing these Councils on the Board are: Andrew Prentice, International Council Chair; Gordon Jensen, Medical Nutrition Council Chair; and Patsy Brannon, Nutritional Sciences Council Chair and Shelley McGuire who is the Research Interest Director. We also have two ex officio members, of course John Courtney is an ex officio member and Barbara Lyle, Chair of the Sustaining Member Committee, represents the Sustaining Members and she has made just an outstanding contribution on behalf of the Sustaining Members. If there any Sustaining Members out there who tried to squish into the tiny room for the Committee meeting, you can see the results of Barbara's activities on behalf of ASN. Now I would like to introduce the staff and I would like to ask them to stand up when I introduce them. I am going to show you the Senior Staff but this is not the whole staff. The whole staff has just done a tremendous job. These are the faces and names you see here to whom you are most accustomed. Again, our Executive Officer, John Courtney; Scientific Programs Manager, Anne Meyers; our Director of Public Affairs [with whom many of you have worked]; our Director of Publications, Karen King; and our Director of Marketing and Development, Paula Eichenbrenner. Thank you all.

Now I want to turn to what did we do and how did we progress on the action items I presented to you last year. The first action was 'clarifying the conflict of interest policy for corporate and academic relationships'. Here is what the issue is here and I do not have to describe it to any single person sitting in this room. Industry academic research is being challenged as evidenced by a whole lot of articles which have come out. They're being challenged for real and perceived bias and this is an important issue to address for this society. We have started to address this issue and I will tell you what we have done to address it. First, this is not a single item, just the corporate and the academic

research is part of the bigger picture and we are trying to position it as such. So there is perceived bias or perhaps true bias which we would have to get rid of in order to advance our scientific program. There are a whole variety of areas -- whether it's involvement in reviewing journals, participating in *Experimental Biology* programs, membership on national committees, even renewing an RO1. So it is not just specific to this one corporate academic area and I have heard this from many people here. What we have done is partner with groups either larger than us or those who have started earlier than us. In fact, FASEB is the main one. They are really the true leader in this conflict of interest project. John and I have been to meetings at FASEB. They have made their toolkit available to us; we have it on our website and have encouraged our members to use it and make it applicable to your own policies. We've also partnered with ILSI and our membership is taking active roles on two active ILSI committees because ILSI again is taking a leadership role in this area. We are working on developing a set of guiding principles for corporate academic relationships that cover the major points and have teeth to them. If they do not have teeth to them nobody is going to buy into them and they won't use them and they won't be considered to be scientific. We are also looking at investigating a research project in this area and, as we found, charity begins at home and we now, for the very first time, have our own conflict of interest policy at ASN. This is being vetted to our Finance Committee, the Board, and we have had legal counsel take a look at it as well. So that is where we are. This is the beginning of a relationship but we will be continuing to work very hard in this area over the years.

So, Action Item #2: Develop and launch ASN Spokesperson program. Here the issue was: ASN members are in the news on a daily basis but the name 'ASN' is not necessarily in the news. What was an approach to that situation? It was to develop an ASN Spokesperson program where members were not speaking for themselves on research but were speaking on behalf of ASN. And I am very pleased to tell you that we have developed such a program. This is the brochure that describes it; there are ten spokespeople who are involved in it at this time. You can see their bios on the website. It is really in the testing phase. We wanted to start small and build on the successes and learn from any mistakes that we might make. I've had interviews ranging from 'What is the future of metabolomics' to 'why is there fiber in Twinkies.' What I want to point out is that the contact comes from ASN and I think that this is critical to the success of this program. They collect background information for us. When they tell us that 'so and so' has contacted them and want information, they contact us and say: This is the information they want. Here are two recent articles in that area, if you want it for background. If you need any more information, ask us and we will get it to you. They follow up with us. Suzanne Price is in charge of this program and doing a great job. Also, while you are on your planes going home, the ten spokespeople will be going through a formal training session for spokespeople on Wednesday. So who do we have to thank for this. We have to thank the Public Information Committee particularly Nancy Wellman who is the chair; two of the people on that committee who have shown real leadership in this area, Jeannie Gazzaniga-Moloo and Roger Clemens who are already spokespersons for other organizations and have helped pave the way for this; the spokespeople themselves and our staff, Mary Lee Watts and Suzanne Price. And we are very pleased to thank IFIC who is very supportive both financially and philosophically of this program. So, thank you IFIC for supporting this program.

Action item #3 was to develop Nutrition Research success stories. Here the issue was the lack of recognition of the importance of nutrition research. We see it all the time; there are many manifestations and one of them is sub-optimal funding for nutrition. So, as a partial and initial

solution to this problem we have developed nutrition research success stories. We now have success stories on all of these that I am showing you on the right hand side here. We are in the process of vetting these success stories with appropriate groups to make sure that they are totally accurate. They will soon appear on the ASN website. You can use them as you want—as success stories or for teaching. Also, they will become part of the Public Policy tool kit to be used in efforts to increase funding for nutrition research. But in addition to looking back at our success stories and what we have already been successful with we are looking forward to developing state-of-the-science papers for opportunities for breakthroughs and areas for future investment. Those, too, will be vetted and put on our website for you to look at. Who do we thank here? We thank Patrick Stover who is chair of the Public Policy Committee and all the members of that committee. They have done just a fabulous job. And also Mary Lee Watts, our Director of Public Affairs. Now this is not germane to what I was just saying but I couldn't help brag on them for this one item. The Nutrition Monitoring language, as proposed by ASN, is included in both the House and Senate versions of the Farm Bill. So whatever you think of the Farm Bill [and I am sure we have disagreements in that area] having Nutrition Monitoring as part of the Farm Bill has to be good.

Item # 4 was to make the EB sessions more current and here the issue was one of timeliness. It takes 18 months, as you know, from the time a proposal was proposed until it occurs. So what was the solution? It was to allow for latebreaking submissions. We had two slots reserved and received 17 latebreaking proposals in September of 2008. This was a case of 'you get what you asked for but you may not want [as many] as you get.' Anne Meyers managed to schedule 7 in addition to our 5 other slots into this EB program. Now what you might say and what we anticipated you might say: If we get all these new programs and we don't know which ones we want to go to and we are probably going to miss out on some of the ones we want to attend. So what we have set up now to help with that issue is to video our key sessions. For those of you who were not able to attend the Presidential Symposium, I think you really missed an outstanding program this year. But, do not fear because we have videotaped it and it will be on our website long with 9 other ASN sessions. Who do we have to thank for this? Janet King, the chair of the Scientific Program Committee. You can imagine how difficult a job this is. And also Anne Meyers for taking all the actions of the committee and trying to find rooms and times for them; Paula Eichenbrenner for outreach to our members; all of our Councils and RISs for suggestions for symposia and minisymposia and, of course, all of our members coming to and presenting at these sessions. So thank you to all the members. And I think we have had a very successful program this year. And now at the end of this talk, let me review the progress of four areas in which I think ASN has excelled this past year and thank those responsible for this success: first is the fact that we have truly strengthened our organizational effectiveness—we have heavily invested in staff—I've shown you the faces of some of them but we have others who are equally effective in what they are doing. In terms of processes, we have developed many related to accountability. Let me explain one, the financial process. John Courtney has completely reorganized the budget process. You will see this when Mary Frances presents her report. So we can see what we are budgeting for, how much can we spend, what have we paid for. We know what we are spending so we can plan for the future. I will go through the Journals operations in just a few minutes because we did a deep review and made a few changes. Communications now include a new website; I hope that you access it; easy to remember: www.nutrition.org We have key newsletters on our website which I know you are bombarded with because I always have to include something in them. We have Nutrition Notes, completely redesigned, a beautiful publication. We have brochures that are coming out all the time to facilitate and help our membership. So who do we thank for all of

this, our infrastructure and most of our thanks to John Courtney our Executive Officer; to Paula Eichenbrenner for member outreach and to Anne Meyers for the Nutrition Notes. Second, optimizing our publications strategy. I am sure that everyone in this room will agree that our Journals are our lifeblood both intellectually and financially and you will see with the Editors' reports that using the new Eigen factor which is being used to measure the impact of the 52 nutrition and dietetic journals that are ranked, we rank Number 1 and Number 2. So who do the thanks go to for that: Our Editors, Denny Bier and Cathy Ross, our Assistant Editors, our Associate Editors, our Editorial Board members, our ad hoc reviewers and to everyone in this room who submits their best work to our journals. Again, thank you for everything you have done for our journals.

AWARD WINNERS – 2008

The Milton L. Sunde Award is given for publication in *The Journal of Nutrition* of outstanding experimental, applied or fundamental research in nutrition that uses an avian species. In 2008, the award is presented to **Ryan Dilger**, PhD, Post-Doctoral Researcher, University of Illinois at Urbana Champaign, for three publications in *JN* in the months of February, August and October of 2007.

The Peter Reeds Memorial Young Investigator Award was established in 2002 with an initial contribution from the **Children's Nutrition Research Center** at Baylor College of Medicine. This year's recipient is **Jeffrey Escobar**, PhD, Assistant Professor, Department of Animal and Poultry Science, Virginia Polytechnic Institute, Blacksburg VA.

The Peter Reeds Memorial Young Investigator Award is given for outstanding research in macronutrient metabolism accomplished within five years of receiving a Ph.D. or completing residency training. The \$1500 award includes an engraved plaque and travel funds not to exceed \$1000.

Jeffery Escobar receives the Peter J Reeds Young Investigator Award in recognition of significant scientific work in macronutrient metabolism, documented in publications within five years of receiving a PhD. The professional community will be pleased that Peter Reeds, for whom the award is named, served as a member of Dr. Escobar's graduate committee. In his current position at Virginia Polytechnic Institute and State University, Dr. Escobar is establishing a large-animal biosafety level 2 facility; an effort that promises to contribute substantially to our understanding of nutrition in infectious disease. His investigations into the metabolic effects of infused leucine on muscle protein synthesis in the neonatal porcine model extend the earlier work of Drs. Davis, Nguyen, Reeds, and others in the USDA team at Baylor College of Medicine. He determined that physiological levels of leucine, but not of isoleucine or valine, can act as a nutrient signal, independent of insulin, to stimulate protein synthesis in skeletal muscles containing either fast-twitch glycolytic or slow-twitch oxidative muscle fibers, but not in liver. He also established a porcine model of viral and bacterial pneumonia that is being used for vaccine development and for investigating the effects of nutrition on infection. An important finding from the use of this model and induction of a systemic inflammatory response was the determination that myostatin mRNA increased in skeletal muscle in association with decreased growth. These results suggest that the immune system may play a role in regulating protein accretion and muscle mass during infection by causing an increase in myostatin in skeletal muscle.

The Mead Johnson Award for Research in Nutrition is given to an investigator for a single outstanding piece of nutrition research or a series of papers on the same subject accomplished within ten years of completing postgraduate training. The award for \$2,500 and an inscribed plaque is made available by **Mead Johnson Nutritionals**. This year's recipient is **Sang Woon Choi, MD, PhD, Scientist I, Jean Mayer USDA Nutrition Research Center on Aging at Tufts University, and Associate Professor, Friedman School of Nutrition Science and Policy, Tufts University.**

Dr Choi receives this award for his significant contributions to understanding the interactions among folate, aging, and colon cancer. He has shown that aging interrupts folate mediated one-carbon metabolism as well as induces molecular and biochemical derangements in the colon. These folate/age interactions alter gene integrity and expression and may help explain why age is such a strong risk factor in colon cancer. Dr Choi is also investigating the potential role of folate and aging on epigenetic phenomena including DNA methylation, histone modifications, and chromatin remodeling by modifying the folate mediated one-carbon metabolism using alcohol or dietary methyl donors. These studies are designed to further clarify how folate/aging interactions alter gene expression to either increase or reduce cancer risk.

The Vernon R. Young Award is given for a single outstanding piece of research or for a series of papers in a related area on amino acid metabolism completed early in their career (usually interpreted as within ten years of postgraduate training). In 2008, the recipient is **Kevin Short, PhD.** The award of \$2500 and an engraved plaque is endowed by the **Ajinomoto Co., Inc.**

The Jury for the ASN Vernon Young International Award for Amino Acid Research for 2008 unanimously agreed to give the award to **Kevin R. Short, PhD, Assistant Professor in Pediatric Endocrinology and Diabetes at the University of Oklahoma Health Sciences Center in Oklahoma City, Oklahoma.** Dr. Short received his PhD degree in exercise physiology from the Ball State University in Indiana. He then joined the program at the Mayo Clinic where he, as a Postdoctoral Fellow, extended his expertise to biochemical and molecular approaches to examine the muscle wasting associated with aging. He mastered the application of stable isotope tracers in the study of protein synthesis and degradation both at the whole body and regional levels. His seminal contribution was the melding of molecular and biochemical approaches to *in vivo* human studies to better understand potential mechanisms for age-related muscle wasting. Besides confirming previous reports that whole body protein turnover declined with advancing age, he was able to demonstrate that there was also a progressive decline in mitochondrial DNA copy numbers, mitochondrial protein concentration and ATP production. These findings demonstrated the close association between mitochondrial function and changes in endurance capacity and insulin sensitivity in young and old individuals. He extended his work to study the effects of aerobic exercise training in both young and old as well as Type 2 diabetic patients. He further examined effects of steroids on muscle wasting and glucose metabolism. Overall, Dr. Short's career and interests embody the spirit of Vernon R. Young, who strongly supported and believed in integrated studies *in vivo* in humans. This is especially true for an individual with a doctoral degree who shows commitment to the conduct of high quality, rigorous studies in human volunteers. This strength of Dr. Short, as well as his interest in the area of aging and protein metabolism and the utilization of stable isotope methodology, dovetail well with Dr. Young's own personal research interest and accomplishments.

The E.L.R. Stokstad Award is given for outstanding fundamental research in nutrition, with preference given to scientists at relatively early stages in their careers. The award of \$2500 and an engraved plaque is supported by an endowment from the **family of E.L.R. Stokstad**. In 2008, the recipient is **Manabu Nakamura**, PhD, DVM, Assistant Professor, Department of Food Science and Human Nutrition, University of Illinois at Urbana Champaign.

Manabu T. Nakamura receives the E.L.R. Stokstad Award as an emerging leader in the area of fundamental research integrating the fields of nutrition, metabolism and molecular biology. He has built an impressive body of work exploring the mechanisms of delta 6 desaturase (DSD) regulation of LC-PUFAs in murine and porcine models. These investigations are fundamentally important to further our understanding of essential fatty acid metabolism, particularly for extending needed knowledge of omega-three fatty acid metabolism and deficiency. This line of inquiry is also very timely given that American diets are shifting to a greater omega-3 to omega-6 fatty acid ratio. His outstanding fundamental research includes the following: (1) the first to clone mammalian DSD, which led to the identification of a key inducer and feedback regulator of the DSD gene (SREBP-1c); (2) the identification of a transcription factor (PPAR alpha) response element in the DSD gene promoter, indicating that peroxisome proliferators directly activate DSD transcription; and, (3) pioneering work in developing DSD-null mice. His investigations are providing evidence that PPAR alpha and SREBP-1c transcription factors “detect” and respond to essential fatty acid status and regulate LC-PUFA synthesis.

The Norman Kretchmer Memorial Award in Nutrition and Development is given to a young investigator aged 45 years or younger for a substantial body of independent research in the field of nutrition and development with potential relevance to improving child health. The award of \$1500 and an engraved plaque are sponsored by **Abbott Laboratories, Ross Products Division**. The 2008 award recipient is **Marie Caudill**, PhD, RD, Associate Professor of Nutrition, Cornell University.

Marie Caudill has focused on the nutritional, biochemical and genetic factors influencing the relationship between folate and human health. Her important contributions have enhanced the understanding the relationships between dietary folate intake, folate status and the use and catabolism of folate during pregnancy as well as on the role of genetic variation in affecting folate metabolism in humans. Her studies provided key information used by the Institute of Medicine in establishing recommendations for folate intake during pregnancy. More recently Dr. Caudill has taken a leading role in studies of the impact of genetic variation in influencing human nutrient requirements. She has been one of very few researchers evaluating the critical role of genetic variation on nutrient requirements in human populations. Her studies of humans with known mutations in methylenetetrahydrofolate reductase (MTHFR) established that individuals with certain mutant forms of MTHFR (e.g. 677 TT genotype) cannot reach optimal folate status using the currently recommended level of folate intake. Innovative studies of this type help establish key paradigms for understanding the roles of genetic variability in influencing the relationship between nutrient intake and optimal health and have a central role in current and future nutrition research.

The Osborne and Mendel Award, sponsored by **ILSI North America**, is given in recognition of outstanding recent basic research in nutrition. In 2008, the award of \$2500 and an engraved plaque is

made to **Steven Zeisel**, MD, PHD, the Kenen Distinguished University Professor in Nutrition and Pediatrics and Associate Dean for Research at the University of North Carolina at Chapel Hill. This award is given in recognition for Dr. Zeisel's seminal body of work related to the importance of dietary choline to optimal human health. In an elegant series of studies, Dr. Zeisel has systematically described choline metabolism and established why this nutrient is required in the human diet. These studies were instrumental in the establishment of the Adequate Intake levels for choline by the Institute of Medicine in their Dietary Reference Intake publication. Further, some of his recent publications have focused on the importance of choline on embryonic neural development and during early life via breastfeeding. His research has consistently been published in the world's leading journals including the *Journal of Nutrition*, *American Journal of Clinical Nutrition*, *Proceedings of the National Academy of Sciences*, and the *FASEB Journal*. Clearly, Dr. Zeisel's ongoing work serves as a template of world-class nutrition research – having importance and relevance from basic science to human application.

The Centrum Center for Nutrition Science Award, made available by **Wyeth Consumer Healthcare**, is given in recognition of recent investigative contributions of significance to the basic understanding of human nutrition. It consists of an award of \$1,500 and an inscribed plaque. The 2008 award is made to **Barbara Rolls**, PhD, Professor and Guthrie Chair in Nutritional Sciences and Director, Laboratory for the Study of Human Ingestive Behavior, The Pennsylvania State University.

Barbara Rolls is an internationally recognized leader in the field of ingestive behavior. Her three-decade long career includes both animal model and human feeding carefully controlled studies. As Director of the laboratory for the Study of Human Ingestive Behavior at Penn State, Dr. Rolls has conducted seminal human feeding trials that have identified the independent contribution of energy density and portion size to food intake. This research has shown that consumption of nutritious low-energy-dense foods is associated with less energy consumption, and loose more weight. In addition, Dr. Rolls and her team have conducted pioneering work showing the importance of portion size, independent of energy density, on the amounts of foods consumed by both adults and children. Clearly, her contributions have major relevance for understanding the determinants and potential solutions to the obesity epidemic in the country. Dr. Roll's has published over 100 peer reviewed research articles and has published eight books, the latest one being 'The Volumetric Eating Plan' that received global coverage by the major news media organizations. Dr. Rolls has received numerous major professional recognitions for her scientific work including her selection as the 2007 W.O. Atwater Memorial lecturer at the *Experimental Biology* meetings.

The E.V. McCollum Award is given to a clinical investigator who is perceived currently as a major creative force, actively generating new concepts in nutrition and personally seeing to the execution of studies testing the validity of these concepts. The award of \$1,500 and an engraved plaque are made available by **Wyeth Nutrition**. The 2008 E. V. McCollum award recipient is **David Ludwig**, MD, PhD, Division of Endocrinology, Children's Hospital, Boston.

David S. Ludwig is a leading clinical investigator in pediatric obesity and nutrition who, nearly a decade ago, began to explore the hypothesis that individuals with a high insulin response to carbohydrate ingestion would gain an especially large amount of weight on a high glycemic index diet. In a seminal paper published in *Pediatrics* in 1999, he established a mechanistic basis for understanding how changes in postprandial blood glucose could affect physiological variables

related to appetite regulation. Subsequent studies confirmed his hypothesis and showed that diets with a low glycemic load could reduce the risk of diabetes and cardiovascular disease. He has also shown that diets identical in energy content but varied by glycemic load have an affect on resting energy expenditure. In a recent long-term randomized controlled trial he showed that individuals with postprandial insulin secretion above the median value in study subjects lost substantially more weight on a low glycemic index diet versus a conventional low fat diet. This affect was not seen in subjects with insulin secretion below the median. Dr Ludwig's body of work clearly shows a link between the effects of dietary composition on metabolism, neuroendocrine response and body weight regulation and strongly suggests that biological factors, and not just psychological ones, play an important role in an individual's response to dietary intervention for the management of obesity. His research has had a major impact on the treatment of obesity and on public health policy.

The E.V. McCollum International Lectureship in Nutrition provides a means to encourage sound advancements in nutritional science and their application for improving health and well-being of people worldwide and serves to commemorate the life and contributions of E.V. McCollum. The 2008-2009 lecturer is **Barry Popkin**, PhD, The Carla Smith Chamblee Distinguished Professor of Global Nutrition, Department of Nutrition, Schools of Public Health and Medicine, University of North Carolina at Chapel. This ASN endowed award consists of an honorarium of \$1500 and travel funds and is supported by the ASN EV McCollum International Lectureship Endowment Fund.

Dr Popkin has been a professor in the Department of Nutrition, University of North Carolina at Chapel Hill since 1977; is also Director of the Interdisciplinary Obesity Center, a Fellow of the Carolina Population Center, Director of the Nutrition Transition Research Program, and Adjunct Professor in the Department of Economics, all at UNC Chapel Hill. After earning his Ph.D. in Agricultural Economics from Cornell University in 1974, Dr. Popkin was a Social Science Staff special member of the Rockefeller Foundation in Manila, Philippines from 1974-76. As a development economist interested in nutrition and East Asia, Dr. Popkin was uniquely poised to study the effects of macroeconomic change, urbanization, and technological advances on the nutrition of populations. His seminal work on these interconnections forged the conceptualization of the nutrition transition, now a major field of study within global health and nutrition. He initiated the Cebu (Philippines) Longitudinal Survey of Health and Nutrition 22 years ago, and more recently the longitudinal China Health and Nutrition survey. He has published more than 200 journal articles and 50 book chapters. The committee was pleased to award the lectureship to Dr. Popkin for his academic achievements and his unflagging energy and enthusiasm for training scholars to continue to advance nutritional science as an interdisciplinary field that solves problems for improve human well-being globally.

The Robert H. Herman Memorial Award is given to a clinical investigator in recognition of contributions of significance to the biochemical and metabolic aspects of human nutrition. It consists of an award of \$1,500 and an engraved plaque. The 2008 award is made to **Simin Meydani**, DVM, PhD, Associate Director, Jean Mayer USDA Human Nutrition Research Center, Tufts University.

Simin Meydani's research has focused on the intersection of nutrition, the immune response, aging, and infectious diseases. She has made important contributions by demonstrating the critical role of nutrition, particularly micronutrients and dietary lipids, in maintaining the immune response and

resistance to common infectious diseases, and thus the health of elderly individuals. She has furthered knowledge of the underlying mechanisms in nutrient-induced modulation of the immune response as well as the molecular changes that lead to aging-associated immune dysregulation. Her recent work published in PNAS introduced a new paradigm for susceptibility of aged persons to viral infections. Using a model virus, she and her colleagues demonstrated that passage of an avirulent virus through an aged host resulted in mutation of the virus into a virulent form. Her work is both innovative and of the highest quality and for these reasons her studies have raised awareness in the nutrition, gerontological, immunological, and medical scientific communities about the importance of nutrition for health promotion and maintenance through the aging years.

The David Kritchevsky Career Achievement Award in Nutrition, initiated in 2006 by **Kraft Foods** [when it was awarded to Dr. Kritchevsky], is presented in 2008 to **Robert M Russell, MD**, Director of the Jean Mayer USDA Human Nutrition Research Center at Tufts University. The Award, consisting of \$2500 and an engraved plaque, is given in recognition of a career devoted to promoting interaction among, support for and assistance of outstanding nutrition researchers in governmental, private and academic sectors resulting in the application of fundamental knowledge to delivery of better nutrition products and information to the public.

Robert M. Russell's career exemplifies devotion to promoting interaction among, support for and assistance of outstanding nutrition researchers in all sectors. His efforts resulted in the application of fundamental knowledge and delivery of better nutrition "products" and information to the public. He is recognized for basic research on vitamin A and its precursors, and his mentorship and academic guidance of doctoral students as well as his critical role in facilitating the careers of other investigators. As Director of Human Studies, Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, Boston since 1981, and as Director, USDA Human Nutrition Research Center on Aging at Tufts since 2001 he facilitated outreach and cooperative research efforts. He served on the Scientific Review Panel for the 2005 Dietary Guidelines for Americans. This award recognizes his committed leadership in professional nutrition-related societies and editorial service, most notably, as (a) Fellow, American Society of Nutrition since 2007; (b) Vice President (2001-2002) and President (2002-2003) of the American Society for Clinical Nutrition; (c) Editor-in-Chief of *Nutrition Reviews* since 2001, co-editor of *Present Knowledge in Nutrition*, 8th and 9th editions; and, Associate Editor of *American Journal of Clinical Nutrition* from 2001 to 2007. Dr. Russell was a member of the FDA Center for Food Safety and Applied Nutrition's Food Advisory Committee from 1999 to 2003 and continued service on projects of nutritional importance at the Food and Nutrition Board of the Institute of Medicine, particularly as FNB Chairman of Panel on Micronutrients from 1998 to 2000; Chair for FNB of the US National Committee to the International Union of Nutritional Sciences (2004-2006); and as FNB Chair (2005-2006).

The Kellogg Prize for International Nutrition is given to a member of the International Nutrition Council actively engaged in research to benefit populations in non-industrialized countries, as demonstrated through publications in the scientific literature, and actively engaged in training new scientists for international nutrition research. The award of \$2500 and an engraved plaque is made available by **Kellogg Company**. The 2008 Kellogg Prize for International Nutrition is presented to **John Beard, PhD**, Professor of Nutritional Sciences and Physiology, The Pennsylvania State University.

John L. Beard is an internationally recognized leader in iron nutrition and its effects on cognition and brain function. He has worked both with animal models and clinical settings. His animal investigations advanced fundamental understanding of mechanisms related to iron nutriture in neurodevelopment; and his clinical studies involved interventions in Nepal and Bangladesh designed to help specify the window of time in development when iron status plays a critical role. Such studies unequivocally show that iron deficiency during key developmental periods produce persistent changes in brain dopamine and behavior that continue into adulthood, even if brain iron concentrations are normalized. His work showing an association of iron deficiency with compromised dopamine function and behavior has had tremendous implications for millions of infants suffering from iron deficiency. A recent study in the Philippines verified that biofortification is a viable approach to combating malnutrition in developing countries. This award particularly recognizes his mentorship of successful graduate students and many cooperative efforts through which Dr. Beard has stimulated research internationally. For example, “cognition” has gained importance as an outcome variable to be measured when doing iron intervention studies. Cooperative studies with colleagues at Johns Hopkins, Kings College in London, the University of Michigan and other centers are ongoing in Nepal, Bangladesh and China. The Kellogg Prize in International Nutrition given this year to John Beard recognizes contribution to international health through studies of child and maternal nutrition, biofortification to remediate nutritional iron deficiency and seminal studies on iron and cognitive-emotional functions.

The Conrad A. Elvehjem Award for Public Service in Nutrition is given in recognition of specific and distinguished service to the public through the science of nutrition. The award of \$1,500 and an engraved plaque is made available by **Kraft Foods**.

In 2008, the award recipient is **Cutberto Garza**, MD, PhD, Provost and Dean of Faculties, Boston College. Recognized for his outstanding contributions to public health through the science of nutrition, Dr. Garza is an international scholar of human nutrition who has a distinguished record of professional service to the national and international community. Dr. Garza’s international service has been through the United Nations system, including the World Health Organization (WHO), the World Food Programme, and the United Nations University (UNU). During his service with the UNU, he established a global network of task forces which focused on capacity building in developing regions to address food, nutrition and agriculture issues through a research and scholarship agenda. In collaboration with WHO, he led a multi-country initiative which culminated in the release of the new growth standards for infants and young children in 2006. Under his leadership at the UNU-Food and Nutrition Programs, major scientific reviews were conducted on emerging issues including childhood obesity, international harmonization of nutrition requirements, and international anthropometric standards for school aged children. At the national level, Dr. Garza has a long history of service on high profile advisory groups, including the being Chair of the Food and Nutrition Board of the Institute of Medicine; Chair of the 1999 U.S. Dietary Guidelines Advisory Committee; Chair of the Food and Drug Administration Infant Formula Subcommittee of the Food Advisory Committee, to name only a few of his contributions. Over the course of his career, Dr. Garza has been a productive researcher and has mentored many young scientists who are now leadership positions. His contributions and impact have been immeasurable, and his 30 year career is a model of service

The Nutrition Science Media Award is presented for consistent, accurate nutrition science reporting for a general audience over the last year. It consists of an award of \$1500 and an engraved plaque. The 2008 recipient is **Elizabeth Cohen**, medical correspondent, *CNN*.

Elizabeth Cohen is a medical correspondent for *CNN*'s health and medical unit. During her 16-year tenure at *CNN*, she has reported award-winning stories, and reports daily on breaking medical news. She writes a regular column for *CNN.com* called "The Empowered Patient." In addition, she has covered all types of nutrition stories that range from cancer and heart disease to dietary supplements to *E coli* and mad cow disease. Her documentary "Fat Chance" looked at causes for the high rate of obesity in the U.S. and examined myths about metabolism and dieting. According to the Director of *CNN*'s Health and Medical Unit, "Elizabeth has earned the respect of health officials and medical experts across the globe for her due diligence in getting the story right the first time and every time." *CNN* colleagues know that Elizabeth speaks with the leading experts to provide solid journalism. Elizabeth has a bachelor's degree in history and a master's degree in public health from Boston University.

The Dannon Institute Mentorship Award, made available by **Dannon Institute**, is given for outstanding mentorship in the development of successful nutritional research science investigators. The award consists of \$2500 and an engraved plaque. This year's recipient is **Dale Bauman**, PhD, Professor of Nutritional Biochemistry, Cornell University.

By his dedication and performance in high-impact research, Dr Bauman has served as an exemplary role model for his students and trainees. He is an international leader in the metabolic regulation of nutrient use for lactation and growth. With 656 publications, he is the second most cited author in Agricultural Sciences including Nutrition for the interval of 1996-2006. His contribution has been recognized by 41 awards and honors from various scientific societies and institutes, the USDA Superior Service Award, the Alexander von Humboldt Award for research considered of greatest significance to U.S. agriculture. In 1988, Dr Bauman was elected to the National Academy of Sciences and served as President of ASN from 2002-2004. His top quality research and personal attributes have enabled him to attract numerous junior scientists to his program. He has served as the major advisor for 13 MS students, 30 PhD students, and 13 postdoctoral fellows. Since 1987, he has served as a minor advisor for 45 MS and PhD students at Cornell. Dr Bauman has been the faculty advisor of 139 undergraduate students. During the last 10 years, he has supervised 35 undergraduate research projects, 12 Honors theses, 6 Presidential scholars, 2 Merrill Scholar winners, and 1 Rhodes scholar.

The Roland L. Weinsier Award for Excellence in Medical/Dental Nutrition Education is presented in recognition of an outstanding career in medical/dental nutrition education. The award of \$2500 and an engraved plaque are sponsored by the **Dannon Institute**. The 2008 recipient is **Daniel Bessesen**, MD, Associate Professor of Medicine, University of Colorado School of Medicine; Head, Endocrinology Section at Denver Health and Hospitals; Associate Director for Research Training, Colorado Clinical Nutrition Unit (CNRU)

Dr. Bessesen is a widely recognized expert in the management of obesity and has authored or co-authored some of the most widely used textbooks for educating medical students and health professional and is a national leader in developing programs and curricula for health care providers.

Dan is also actively involved in the Centers for Obesity Research and Education (CORE). He is a routine contributor to *Obesity Management*, the journal published by CORE, which is dedicated to informing health care professionals about the latest advances in obesity research and giving them access to the most up-to-date tools for weight management. In summary, Dr. Bessesen has national prominence as a highly effective communicator, mentor and medical educator and is an exceptional recipient of the Roland L. Weinsier Award for Excellence in Medical/Dental Education from the American Society for Nutrition.

The Excellence in Teaching Award, given for outstanding contributions to teaching nutrition is awarded in 2008 to **Janet Greger**, PhD, Emerita Professor, University of Wisconsin at Madison. The award of \$2500 and an engraved plaque is sponsored by **Cengage Learning**.

Janet Greger has educated college students (both majors and non-majors in nutrition), consumers, physicians, science teachers, legislators, physicians and other clinicians in a variety of ways during the last 34 years. The breadth of her nutrition education efforts is unique.

There are consistent patterns in her nutrition education efforts regardless of the target audience. Her presentations on nutrition (written and oral) are characterized by her willingness to get to the heart of the matter quickly; to carefully, but critically analyze the available data; and to offer conclusions and recommendations in the simplest way possible. Her writings and oral presentations are examples of clarity, organization, and usefulness to the intended audience. This consistent style of communication about nutrition is a major reason why she was named an ISI Highly Cited Investigator. Dr. Greger has demonstrated a career-long commitment to nutrition education at all levels and deserves recognition by our nutrition community. She is one of the few nutrition scientists who has experience working in the political scene in Washington DC at the federal level as well as at the experimental level; and as such brings this knowledge as well to her teaching.

The McCormick Science Institute Research Award, given for work which has contributed importantly to understanding the potential health benefits of culinary herbs and spices in humans, is presented for the first time in 2008. **Bharat Aggarwal**, Ph.D, Ransom Horne Jr. Endowed Professorship in Cancer Research and Chief of the Cytokine Research Section at the University of Texas M. D. Anderson Cancer in Houston, is the first recipient in 2008.

Prior to accepting his current position, Dr. Aggarwal was employed by Genentech Inc., where he discovered TNF-alpha and TNF-beta, essential components of the immune system. The focus of his research is to identify dietary components that suppress inflammation and critical pathways in cancer initiation and progression, including cellular proliferation, apoptosis, invasion and angiogenesis. His group has shown that herbs and spices such as turmeric, red chili, cloves, fennel, ginger, black pepper, basil, and fenugreek have a potential in prevention and treatment of cancer through suppression of inflammatory pathways. His work has been disseminated in nearly 450 peer-reviewed articles and invited reviews published in high impact journals and he been granted almost 35 patents. Since 2001, Dr. Aggarwal has been listed as one of the "World's Most Highly Cited Immunologists" by the Institute of Scientific Information. Dr. Aggarwal's cutting edge research defining the potential role of spices in the prevention and treatment of cancer through suppression of inflammatory pathways makes him an exceptional inaugural recipient of the McCormick Science Institute Research Award from the American Society for Nutrition.

The Mary Swartz Rose Young Investigator Award, given to an investigator within ten years of postgraduate training, for outstanding research on the safety and efficacy of bioactive compounds for human health, is presented for the first time in 2008. The award of \$2500 and an engraved plaque is made available by **The Council for Responsible Nutrition Mary Gamble, PhD**, is the first recipient in 2008.

Dr Gamble is Assistant Professor of Environmental Health Sciences at Columbia University in New York City. Her interests lie in linking our basic scientific knowledge of nutritional biochemistry to its applications in public health. Dr Gamble's early work provided a solid understanding of basic science, applying recombinant protein and molecular biology technologies to further our understanding of retinoid metabolism and regulation by transcriptionally active retinoid metabolites. At the same time, Dr Gamble pursued her public health interests, undertaking two public health research projects one in the Republic of the Marshall Islands and the other in Northeastern Brazil where vitamin A deficiency is prevalent.

For Dr Gamble, given the overwhelming amount of scientific information available today, it is increasingly challenging, yet even more important, to translate basic science into hypothesis-driven field research. Her studies have provided an ideal setting in which to apply knowledge of nutritionally regulated metabolic pathways to the understanding of arsenic detoxification, and importantly, to translate this knowledge to the very applied issue of alleviating the problem of arsenic toxicity in Bangladesh and the many other populations affected worldwide.

The Mary Swartz Rose Senior Investigator Award, given to an investigator for outstanding research on the safety and efficacy of bioactive compounds for human health, is presented for the first time in 2008. The award of \$2500 and an engraved plaque is made available by **The Council for Responsible Nutrition**. In 2008 the award recipient is **Bruce Ames, PhD**, Senior Scientist, Children's Hospital Oakland Research Institute (CHORI) and Professor of Biochemistry and Molecular Biology, University of California, Berkeley.

Dr Ames has made exceptionally innovative contributions in six areas of the science of micronutrients, each of which is likely to have a major impact on human health. (1) Lipoic acid and acetyl-carnitine supplements ameliorate the mitochondrial decay of aging; (2) Triage during micronutrient shortage accelerates the degenerative diseases of aging; (3) High dose B vitamins stimulate altered enzymes with decreased binding for a coenzyme; (4) High dose B vitamins and aging; (5) gamma-Tocopherol as an important form of Vitamin E; (6) Micronutrient deficiencies and brain development. Related to Dr Ames investigations into micronutrient deficiencies and brain development: He has pointed out that dark skin is selected for, and is protective in the tropics against the UV burning rays of the sun, just as white skin is selected in Northern (high) latitudes for trapping as much UV as possible (about 6 times as efficient as dark skin) in order to make vitamin D. Thus, fair-skinned Northerners are at risk in Australia and Arizona from sunburns and UV-induced cancer and dark skinned people in the Northern US or Europe with little sun are at risk from rickets, bone fractures and probably some types of cancer. It remains to be seen whether the levels of vitamin D that occur in the population are sufficiently low to result in brain dysfunction.

FELLOWS –2008

Richard G. Allison, PhD, Richard Allison, Senior Scientific Advisor, Life Sciences Research Office and retired Executive Director, American Society of Nutrition.

Dr. Allison joined the staff of the American Institute of Nutrition and the American Society of Clinical Nutrition in 1984 and for over two decades strove to provide nutrition research scientists with an outstanding membership association. Members appreciated his quiet and supportive leadership style always promoting members' interests and involvement. During his tenure, the Society early recognized the importance of electronic publication and the value of an internet presence (nutrition.org), streamlined their membership process and enhanced student membership, gained ownership in the *Experimental Biology* meeting and utilized research interest sections to enliven scientific exchange, provided disproportional leadership at the presidency of FASEB, and supported federal and international nutrition programs through successful cooperative agreements, grants and contracts. The production of two state-of-the-art reports on preterm and term infant formulas during transition of FASEB's Life Sciences Research Office to an independent organization occurred under his administrative oversight.

The Commissioner of the US Food and Drug Administration awarded a special citation to Dr. Allison for contributions during the 1970's to the multi-year review of the hundreds of ingredients know as "Generally Recognized as Safe". His tenure as a senior staff scientist with LSRO resulted in numerous reports, panel reviews and consultations for FDA, USDA and others on national nutrition issues. He had volunteered as an assistant editor for the *AJCN* and was working with leaders of the nutrition society through LSRO when he was asked to assist a search committee that eventually drafted him for a position with the Societies. He received a standing ovation at the 1985 annual meeting for changes he introduced and a standing ovation at the 2007 annual meeting upon his retirement for the service he has given to so many members of our nutrition community.

Gladys Block, PhD, Professor, Epidemiology and Public Health Nutrition, School of Public Health, University of California, Berkeley.

Dr Block is a prolific and highly regarded researcher in her fields of endeavor. Her research activities have been focused on the refinement and application of dietary assessment methods and on the elucidation of the role of dietary antioxidants and oxidative stress markers in chronic diseases. Prominent among her contributions to dietary assessment research is her development of a food frequency questionnaire that has been widely used by researchers around the world. Her methodology has been adapted for many situations, including the assessment of the dietary intake of astronauts on the International Space Station on a real-time basis.

Also significant is that Professor Block is directing attention to improving the methodology of physical activity assessment. This is an area fraught with problems that have impeded adequate evaluation of energy output which is necessary to our understanding of conditions that predispose to overweight and obesity conditions. Dr Block is an active reviewer for numerous scholarly journals, and is a consultant to a number of professional and governmental agencies. Her professional public service activities included the NIH Data, Safety and two Monitoring Committees of the National Eye Institute, the Nutrition and Clinical Chemistry Integrated Product Team of NASA, and the Nutrition

and Electrolytes Panel of the U.S. Pharmacopoeia. She also served on the Epidemiology and Surveillance Research Advisory Committee and the Peer Review Committee on Carcinogenesis, Nutrition and the Environment of the American Cancer Society.

Junshi Chen, MD, Research Professor, Institute of Nutrition and Food Safety, Chinese Center for Disease Control and Prevention.

Dr Chen has been engaged actively in nutrition and food safety research for more than 40 years at the Institute of Nutrition and Food Safety, Chinese Center for Disease Control and Prevention (the former Chinese Academy of Preventive Medicine), Beijing. He also serves as an adjunct professor of the School of Public Health, Peking University and the Division of Nutritional Sciences, Cornell University.

His major research interests are relationships among diet, lifestyle and chronic diseases. Among his accomplishments for which he is known best is the series of large epidemiologic studies on diet, nutrition and chronic diseases carried out in 65 counties in China. Starting in the late 80s he has also conducted a series of studies on the protective effects of tea on cancer. These activities have included the study of animal models and human interventional trials. In recent years, he has devoted himself increasingly to the study of iron deficiency anemia control in China. His more recent research achievements include the identification of soy sauce as the most appropriate food vehicle for iron fortification programs in China and NaFeEDTA as the most efficacious and effective fortificant.

He has been of great service to the nutrition community internationally. He is the member of the expert panel who wrote the WCRF/AICR report on “Food, Nutrition and Prevention of Cancer: A Global Perspective (1997) and was the panel member of the new WCRF/AICR report published in 2007.

D’Ann Finley, PhD, Manuscripts Editor, *American Journal of Clinical Nutrition*.

Dr Finley’s major qualification for Fellowship is her very major contribution to the inner workings of both ASN journals, *The Journal of Nutrition (JN)* and *The American Journal of Clinical Nutrition (AJCN)*. The *AJCN* owes its upward trajectory of excellence in no small way to the presence of D’Ann as the Manuscripts Editor. In this capacity, she continued to expand her encyclopedic knowledge of all aspects of nutrition and clinical nutrition, but also consistently exhibited her innate skills in evaluating scientific quality. Charles Halsted has observed, “D’Ann was consistently and totally invaluable for my initial guidance into the skills of editorship and then her availability for insightful scientific discussions of the merits (or lack thereof) of manuscripts that ranged over many topics of nutrition. “

Also noteworthy is D’Ann has a respectable CV of her own publications. She is often called upon to participate as speaker, organizer and scientific contributor to a wide range of worldwide nutritional scientific conferences. She performs all these extra functions outside of her 100% fulltime *AJCN* job.

K.C. Hayes, PhD, Professor of Biology (Nutrition), Brandeis University.

Dr Hayes is an enormously productive experimental nutrition scientist who has enriched the literature with numerous and substantive papers, particularly on fatty acid metabolism in various species.

He is the author or co-author of more than 190 reports, 24 chapters, and 187 abstracts. He is co-inventor on 10 patents, and several discoveries in his lab currently have marketplace applications e.g. discovery of a taurine requirement for cats and infant primates led to taurine inclusion in all cat foods and human infant formulas. ALPO cat food originated from research in Dr Hayes lab and currently most supermarkets in the USA carry SMART BALANCE, a trans fat-free margarine designed to improve the LDL/HDL ratio. Phytosterol-added snack food of his design entered the US market in the Fall of 2005.

David A Jenkins, PhD, DSc, FRCP (Medical Scientist), Professor, Departments of Medicine and Nutritional Sciences, Faculty of Medicine, University of Toronto and Staff Physician, Division of Endocrinology and Metabolism and Director of the Clinical Nutrition and Risk Factor Modification Center, St Michael's Hospital.

Dr Jenkins has served on committees in Canada and the United States that have formulated nutritional guidelines for the treatment of diabetes and most recently recommendations for fibre and macronutrient intake for the general population under the new joint United States-Canada DRI system (RDAs) of the National Academy of Sciences (Washington DC). His research area is the use of diet in the prevention and treatment of hyperlipidemia and diabetes. He has over 200 original publications on these and related topics. His team was the first to define and explore the concept of the glycemic index of foods and demonstrate the breadth of metabolic effects of viscous soluble fiber, including blood glucose and cholesterol lowering. His studies, on combining cholesterol lowering food components, (dietary portfolio) have been recognized as creating an effective dietary alternative to drug therapy (statins) for many people and were the only dietary approach referenced in the Current Guidelines of the US National Cholesterol Education Program (ATP III).

Dr Jenkins awards include the Borden Award of the Canadian Society of Nutritional Sciences; the Goldsmith Award for Clinical Research of the American College of Nutrition; the Vahouny Medal for distinction in research in dietary fiber; the McHenry Award of the CSNS.

Dr Jenkins is a world renowned physician and nutritional scientist who has contributed greatly (and continues to contribute) to the dietary management of diabetes and the hyperlipidemias. He has also played a major role in Committees who have translated the science into public policy and dietary recommendations in Canada and the USA.

Ronald Krauss, MD, Senior Scientist and Director, Atherosclerosis Research, Children's Hospital Oakland Research Institute (CHORI).

Dr Krauss has actively investigated the genetic, metabolic, and nutritional influences on cardiovascular disease risk, and he is considered to be a leader in the area of diet-gene interactions. Dr Krauss was the first to demonstrate that a common genetic trait affecting lipoprotein metabolism

and coronary heart disease risk influences the individual's lipoprotein response to dietary fat. His research findings emphasize the need to individualize dietary recommendations to individual genetic characteristics. Currently Dr Krauss is investigating the relationship of sequence polymorphisms in candidate genes to lipoprotein phenotypes and dietary response.

Additionally, Dr Krauss is also committed to disseminate basic and clinical nutrition information to the public and to incorporate researching findings into public policy. He established and is the founding chair of the Scientific Council on Nutrition, Physical Activity and Metabolism in the American Heart Association (AHA). In this capacity, he has served as the primary author of the two most recent Dietary Guidelines statements by the AHA. These contributions were acknowledged by receipt of the AHA Distinguished Achievement Award in 2001. Dr Krauss also served on the NAS/IOM Dietary 'Reference Intake Panel on Macronutrients.

Roland M Leach, Jr., PhD, Professor Emeritus of Poultry Science, The Pennsylvania State University.

Dr Leach is a pioneer in the field of essential inorganic element nutrition and is considered by many to be the world's foremost authority on the metabolic function of manganese. He is also widely recognized for having identified and characterized a major skeletal disease of poultry known as tibial dyschondroplasia (TD). TD costs the poultry industry millions of dollars annually and Dr Leach's research has contributed greatly to our understanding of the biochemical and molecular mechanisms underlying this complex anomaly. Over the years, Dr Leach's research program has evolved from the nutrition of trace elements and their roles in skeletal physiology to the elucidation of the roles of systemic hormones and growth factors responsible for each progression in the life of an epiphyseal growth plate chondrocyte, which ultimately controls longitudinal bone growth.

As one of the most highly respected scientists in this field, Dr. Leach's remarkable accomplishments have been recognized worldwide, as evidenced by his many invited talks at prestigious international and national conferences and symposia over the past four decades.

Forrest H Nielsen, PhD, Research Nutritionist, USDA/ARS Grand Forks Human Nutrition Research Center, Grand Forks ND.

Dr Nielsen's major contributions include demonstrating bioactive, if not essential, actions of the ultra trace elements, boron and nickel. His original research has also included several other ultra trace elements including silicon and arsenic. He organized the workshop and provided follow-up support including institutional funds that resulted in developing the AIN-93 rodent diet. Dr. Nielsen was a co-author of the resulting publication that has become a Citation Classic.

Forrest Nielsen served as Director of the Grand Forks Human Nutrition Research Center for 16 years from 1985-2001. He has authored/co-authored over 300 publications, including peer reviewed original research publications, 110 invited chapters, symposia proceedings, reviews and expert opinions as well as an additional 185 abstracts.

He has been an invited speaker for over 100 seminars/symposia and more than 40 Workshops both here and abroad. Especially notable is his consistent participation in leadership activities (i.e.

organizing and Chairing Symposia at our annual ASN meetings). He currently serves on three journal editorial boards, previously served on the editorial board of *The Journal of Nutrition*, and is a leader in several professional societies. He was President of the International Society for Trace Element Research in Humans from 1993-1995.

Paul Pencharz, PhD, Professor of Pediatrics and Nutrition, University of Toronto.

Dr Pencharz is one of small group of experts internationally whose research has defined human amino acid requirements. He has also been a staunch supporter of our Society as a committee member, as a reviewer for the Society's Journals and by introducing a new generation of members through presentations at the Society's annual meetings by his students and post doctoral fellows.

Dr Pencharz had made several important contributions to knowledge. With his long-time research partner, Ronald O Ball, Dr Pencharz has established the Indicator Amino Acid Oxidation method as a novel and now "Gold Standard" method for determining requirements for dietary amino acids in humans. Using these techniques Drs Pencharz and Ball have determined the requirements for all 8 of the dietary indispensable (essential) amino acids in adults and have also applied their "Minimally Invasive Indicator Amino Acid Oxidation Method" to determine the requirements of essential amino acids in children, in health and in disease. More recent studies have focused on the direct measurement of the utilization of food sources of protein. Starting with studies in piglets who were fed either parenterally or enterally, Drs Pencharz and Ball have shown that the "gut plays a major role in whole body amino acid metabolism." Once these finding are confirmed in human neonates, the clinical implication of this work is a move toward the development of parenteral amino acid solutions which are derived directly from experimental data. It is expected that this will result in better growth of human neonates requiring TPN and hence more rapid recovery from disease.

In recognition of his contributions to nutritional research, Dr Pencharz has won awards from the Canadian Society for Nutritional Sciences, the Clinical Research Society of Toronto and the March of Dimes. Drs Pencharz and Ball were the recipients of the Osborne and Mendel Award in 2002.