

1st GLOBAL SUMMIT ON THE HEALTH EFFECTS OF YOGURT

Experimental Biology 2013 Wednesday, April 24, 2013, 8:00 AM Boston Convention Center, Room 151AB















1st GLOBAL SUMMIT ON THE HEALTH EFFECTS OF YOGURT

•	8:00	Welcome & Introduction
		Sharon M. Donovan and Raanan Shamir
•	8:30	Dairy Products in Global Public Health
		Moderators: Gail Harrison & Barbara Rolls
		Speaker: Andrew Prentice
•	9:00	Dairy and Yogurt Consumption: Health Benefits and Cost
		Effectiveness
		Moderator: Ricardo Uauy
		Speaker: David McCarron
•	9:30	Principles & Evaluation Tools for Assessing Nutrient Density
		Application to Yogurt
		Moderators: Mauro Fisbera & Chris Cifelli

• 10:30 Break

• 11:00 4 Workshops In Parallel

• Dairy and Yogurt in Nutrition-Economics

Moderator: Ricardo Uauy

Speakers: Andres Pichon-Riviere & David McCarron

• Yogurt and Gut Health

Speaker: Victor Fulgoni

Moderator: Francisco Guarner & Mary Ellen Sanders Speakers: Dennis Savaiano & Lorenzo Morelli

 Yogurt and Bone Health Moderator: Connie Weaver Speaker: René Rizzoli

• Health and Nutritional Benefits of Yogurt in Specific Populations

Moderator: Widjaja Lukito

Speakers: André Marette & Simin Meydani



• 03:30



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•	12:00	Lunch (Box Lunch distributed in the meeting room)
	12.00	Editer (box Editer distributed in the meeting room)
•	12:20	Report from concurrent workshops (In Plenary Room)
•	01:00	 Group Discussions: How Can Yogurt Improve One's Diet and Health? Moderators: Angelo Tremblay & Frans Kok Yogurt & Weight Management Speaker: Paul Jacques Yogurt Consumption to Prevent Metabolic Diseases: Epidemiological and Experimental Studies Speaker: Arne Astrup Diet and Lifestyle Behaviors of Yogurt Consumers Speaker: David Grotto
•	02:30	 Dairy Dietary Recommendations Moderators: Johanna Dwyer & Luis Moreno The Science Behind Current Dairy Dietary Guidelines Speaker: Connie Weaver Science and Policy Needs Related to Dietary Yogurt Recommendations

Closing (Sharon Donovan & Raanan Shamir)

Speaker: Bruce German



Sharon DONOVAN, PhD University of Illinois at Urbana-Champaign, IL, USA

Co-Chair

Sharon Donovan received her B.S. and Ph.D. in Nutrition from the University of California, Davis. After completing a post-doctoral fellowship in Pediatric Endocrinology at Stanford University School of Medicine, she accepted a faculty position at the University of Illinois, Urbana in 1991. She was promoted to Professor in 2001 and, in 2003, was named the first recipient of the Melissa M. Noel Endowed Chair in Nutrition and Health at the University of Illinois. She served as Director of the Division of Nutritional Sciences Interdisciplinary Graduate Program from 1999-2009. She is actively involved in her professional societies and currently serves as the Presidency of the American Society for Nutrition (2011-2012).

Her research focuses on pediatric nutrition, with an emphasis on optimization of neonatal intestinal development. She compares the biological effects of human milk and infant formulas on intestinal function in human infants, neonatal piglets and in various models of intestinal disease.

She has published over 100 peer-reviewed publications, review articles and conference proceedings. She has garnered ~ \$20M in research funding as principal investigator or co-Investigator and her research is funded by NIH, USDA and private industry and foundations. She the recipient of several awards in recognition of her research, including the Mead Johnson Award and the Norman A. Kretchmer Award from the American Society for Nutrition.







Raanan SHAMIR, MD, PhD

Sackler Faculty of Medicine, Tel Aviv University Institute of Gastroenterology, Nutrition and Liver Diseases at Schneider Children's Medical Center of Israel

Co-Chair

Raanan Shamir is Professor of Pediatrics at the Sackler Faculty of Medicine, Tel Aviv University, and the Chairman of the Institute of Gastroenterology, Nutrition and Liver Diseases at Schneider Children's Medical Center of Israel.

Raanan Shamir received his MD degree in the Hebrew University in Jerusalem, Israel, and was trained in Pediatrics at the Beilinson Medical Center, in Petach-Tiqva, Israel. In the early 90's, he was a fellow at the Division of Pediatric Gastroenterology and Nutrition at The Children's Hospital of Philadelphia, and came back to Israel to be the Head of the Department of Nutrition at the Israel Ministry of health, and then held the position of Head of the Gastroenterology and Nutrition Unit at Meyer Children's Hospital in Haifa.

Prof. Shamir published more than 250 original papers, reviews and comments, book chapters and guidelines. His research has been supported by prestigious funds such as the European Community Framework funds and the Israel Science Foundation.

His current research areas include exploring the effects of oral insulin supplementation on the intestine, pediatric nutrition, celiac disease, inflammatory bowel disease and childhood hyperlipidemia.

Prof. Shamir serves as an Editor for the pediatric section of Current Opinion in Clinical Nutrition and Metabolism, is the Senior Associate Editor of the Journal of Pediatric Gastroenterology and Nutrition (JPGN), and serves as a reviewer for journals in the field of Pediatrics, Nutrition, Gastroenterology and atherosclerosis.

Past committee appointments include: President of the Israel Society for Pediatric Gastroenterology and Nutrition, Chairman of the Scientific Committee on Milk and Human Health at the Israel Ministry of Health, Chief Scientist Office, Member of the Committee on Nutrition, European Society of Pediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN CoN), 2004-2012, ESPGHAN Council member, 2005-2009, Council member of the Israel Pediatric Association, 2008-2012, Chairman of ESPGHAN CoN, 2008-2012.

Current committee appointments include being the, Chairman of the Governmental Supreme Committee on Food, Israel Ministries of Health, Agriculture, Commerce and Environment, Chairman of the Nutrition Committee of the Israel Pediatric Association, Member of the General Assembly, Upper Gastrointestinal Section, Scientific committee of the UEGF (United European Gastroenterology Federation), Member of the Scientific Committee, ESPEN (European Society for Clinical Nutrition and Metabolism) and President of the Israel Strauss Institute for Nutrition.







Gail HARRISON, PhD UCLA Fielding, School of Public Health, CA, USA

Gail Harrison, PhD current serves as Professor, Dept. of Community Health Sciences, UCLA School of Public Health and Senior Research Scientist for the UCLA Center for Health Policy Research. Dr. Harrison's research career has been devoted mostly to issues basic to optimizing nutritional status for women and children, both in the US and internationally. This work has focused both on problems of undernutrition and on obesity, and on methodological issues related to body composition and to dietary assessment in various populations. Her earliest research focused on maternal obesity and effects on newborn body composition. Throughout the 1980s, Dr. Harrison served as chair of the Scientific Coordinating Board for a USAID-funded major study of the functional effects of mild to moderate undernutrition. This involved about 400 field and laboratory workers in three countries plus the US. The effort resulted in more than 150 publications and still serves, as a public use dataset, the basis for ongoing research. In the US, Dr. Harrison's recent policy-related work has involved regular collaboration (nationally and locally) with the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) and other child nutrition programs.

Dr. Harrison received a Bachelors of Science degree in Foods and Nutrition from the University of California, Santa Barbara, a Masters in Nutritional Sciences from Cornell University and a PhD in Biological Anthropology from the University of Arizona.







Barbara J. ROLLS, PhD Helen A. Guthrie Chair of Nutritional Sciences The Pennsylvania State University, University Park, PA, USA

Barbara J. Rolls, PhD is a graduate of the University of Pennsylvania, and received her PhD in physiology from the University of Cambridge, England. After spending her early research career at the University of Oxford, England, Dr. Rolls joined the faculty of the Johns Hopkins University School of Medicine as Professor of Psychiatry. In 1992, she became a faculty member at The Pennsylvania State University where she is Professor and the Helen A. Guthrie Chair of Nutritional Sciences.

Dr. Rolls' research includes characterization of mechanisms that control thirst as well as studies of hunger, satiety, and obesity. Her studies that received a MERIT award from the National Institute of Diabetes and Digestive and Kidney Diseases have demonstrated how characteristics of foods such as variety, energy density, and portion size can influence energy intake across the lifespan.

Her more than 250 research articles have been published in outstanding journals such as *The American Journal of Clinical Nutrition, The Journal of Nutrition, The New England Journal of Medicine, Appetite*, and *Obesity*. She has communicated to the public through the media and her six books including *Thirst, The Volumetrics Weight-Control Plan, The Volumetrics Eating Plan*, and *The Ultimate Volumetrics Diet*.

Dr. Rolls has served as President of both the Society for the Study of Ingestive Behavior and The Obesity Society. She has also served on the Advisory Council of NIDDK and on the National Task Force on the Prevention and Treatment of Obesity.

Her awards include: Honorary Member of the Academy of Nutrition and Dietetics, Fellow of the American Association for the Advancement of Science, International Award for Modern Nutrition, Atwater Lecturer, ASN Centrum Award in Human Nutrition, The Obesity Society's George A. Bray Founders Award and ASN's Fellows Class of 2011.







Andrew PRENTICE, PhD MRC International Nutrition Group, London School of Hygiene & Tropical Medicine, UK

Andrew Prentice is Director of the MRC International Nutrition Group based at the London School of Hygiene & Tropical Medicine (LSHTM). He also directs the group's permanent field laboratory, MRC Keneba, in rural Gambia. The group is also active in Kenya, Tanzania and Bangladesh.

Born and bred in Uganda, he received a BSc in Biochemistry from Leeds and PhD in Nutrition from Cambridge University. Following 5 years of post-doctoral work in Keneba he returned to the UK to lead the Energy Regulation and Obesity Group at the MRC Dunn Clinical Nutrition Centre, Addenbrooke's Hospital. During this period he was involved in the development and exploitation of numerous novel technologies including stable isotope methods for assessing breastmilk intake and free-living energy expenditure ($^2\mathrm{H}_2^{18}\mathrm{O}$), and whole-body calorimetry.

In 1999 he left Cambridge to establish his current research team at LSHTM and refocus his attention exclusively on studying diet-disease relationships in low-income countries. The work of his research team is focused in 4 areas: nutritional modulation of immunity and infectious diseases; combating micronutrient deficiencies in poor populations; calcium, vitamin D and bone health; and nutritional genetics. The emphasis is on discovery science in response to a conviction that the development of more effective public health interventions is still greatly hampered by critical knowledge gaps.

Andrew has been a member of numerous national and international advisory committees on nutrition and is a former Vice-President of EASO and past Chair of the International Nutrition Council of the American Society for Nutrition (ASN). His work has been recognised by a number of awards, most recently the EV McCollum International Award 2010/11 from ASN. He has published over 300 peer-reviewed papers







Ricardo UAUY, PhD Institute of Nutrition & Food Technology, University of Chile London School of Hygiene & Tropical Medicine, UK

Professor of Human Nutrition, Institute of Nutrition and Food Technology, University of Chile Professor Public Health Nutrition, London School of Hygiene and Tropical Medicine, University of London.

He holds the position of Professor of Public Health Nutrition at the Institute of Nutrition (INTA) University of Chile and in London School of Hygiene and Tropical Medicine.

He received his MD from the University of Chile in 1972, and his PhD in Nutritional Biochemistry from MIT in 1977. He has trained in Pediatrics and Clinical Nutrition and is Board Certified in Pediatrics and Neonatal-Perinatal Medicine (USA). He was president of the IUNS from 2005-09.

Prof Uauy has participated as an expert in multiple WHO/FAO expert committees in 2002 Member (Chairperson) of the WHO/FAO expert consultation on Diet and Nutrition Prevention of Chronic Dieases and Global Strategy WHO/03; in 2005 Member WHO expert consultation on Prevention and Control of Childhood Obesity; in 2006 Member WHO expert panel for Scientific Update on Carbohydrates in Human Health/Disease; in 2007 Member (Chairperson) of the WHO expert panel for Scientific Update on Trans Fatty Acids; in 2010 Member (Chairperson) FAO/WHO Expert Committee on Fats and Fatty Acids in Human Health.

He also has received many awards, most notably PAHO's Abraham Horwitz award for Leadership in Interamerican Health 2005, 2012 Edna and Robert Langholz International Nutrition Award (Academy of Nutrition and Dietetics USA) and the National Applied Science award given by the government of Chile 2012.

He has published over 350 peer reviewed indexed papers and edited 10 books. He is also a member of the Expert Panel for the WCRF/AICR Second Expert Report and subsequent Policy Report and the current Rolling Revision of the WCRF report 2013.







David McCARRON, MD, PhD Department of Nutrition, University of California, CA, USA

Dr. McCarron is an Adjunct Professor with the Department of Nutrition, University of California, Davis and former Professor of Medicine and Head of the Nephrology Division at Oregon Health & Science University. He currently directs the public/private partnership, Shaping America's Youth, addressing childhood inactivity and excess weight.

An internationally recognized authority on the role of dietary nutrients in cardiovascular disease, his laboratory and clinical research originally identified: the effect of the DASH diet on high blood pressure; the amelioration of salt sensitivity by higher mineral intake; that adequate dietary calcium intake was associated with lower BMI; that human sodium intake was constrained within a narrow physiological range. He was the 2004 recipient of the International Award for Modern Nutrition, which is given in recognition of his research contributions to our understanding the role of nutrition in hypertension.

He is the author of more than 250 scientific publications, over 500 scientific papers at research meetings and serves on the editorial boards of several professional journals. Dr. McCarron is a Fellow of the American College of Physicians and the AHA Council for High Blood Pressure Research and is a founding member of the Board of the American Society of Hypertension. A frequent speaker at U.S. and international medical research meetings and symposia, he has spoken at over 200 in more than 20 countries. Dr. McCarron received his undergraduate degree in chemistry with highest honors from Williams College and medical degree from the University of Pennsylvania.

He completed his Internal Medicine training at Case Western Reserve-University Hospitals and Nephrology at Tufts-New England Medical Center where he also served as Chief-Resident in Medicine. He is board certified in Internal Medicine and Nephrology.







Mauro FISBERG, PhD Federal University of Sao Paulo, Brasil

Born in Santos, São Paulo, Brazil, August 17th, 1953, married, one child. <u>Pediatrician and nutrologist</u>

- Graduated in Medicine (Federal University of Sao Paulo, 1976)
- Pediatric Residence (Federal University of Sao Paulo, 1978)
- Nutrition Specialization-World Hunger Program, United Nations University (1980) current status Alumni
- PhD in Pediatric Nutrition (Federal University of Sao Paulo , 1987)
- Fellow Kellog's Fellowship in Human Development (Partners of the Americas 1992-1994) - current status Alumni

Present situation:

- Associate Professor and Clinical Coordinator of the Adolescent Service, Pediatrics Department, Federal University of São Paulo-UNIFESP- BRAZIL
- Scientific Coordinator of the ILSI-Brasil Task Force: Healthy Life Styles
- Past General Secretary and ex-president, Latin American Society for Pediatric Research-SLAIP
- Member of the Steering Committee of the Post Graduation in Pediatrics and Pediatrics applied Sciences, Federal University of Sao Paulo
- Director of Nutrociencia Assessoria em Nutrologia (Nutrology Advisory Center)
- Advisor of the Nutrition Department of Brazilian Pediatric Society and Sao Paulo Pediatric Society

Activities:

- More than 80 papers published in indexed magazines
- More than 400 papers presented in national and international congresses.
- More than 250 conferences in national events.
- More than 100 conferences and presentations in International events.
- More than 40 events organized in Pediatric and Nutrition, in Brazil
- 40 papers published as Tutor (MsC and PhD students papers)
- 52 chapters in books as invited writer
- 6 books published
- H factor 16







Chris J. CIFELLI, PhD Nutrition Research, Dairy Research Institute

Christopher J. Cifelli, PhD currently serves as a Director of Nutrition Research at the Dairy Research Institute.

In this position, Dr. Cifelli directs dairy-centric research in two platforms, the Cardiometabolic Health platform, as well as the Digestive Health platform. In his role, Dr. Cifelli is responsible for the strategic planning, development, and management of both research programs as well as working to effectively communicate research findings to both internal and external scientific and lay audiences.

Dr. Cifelli obtained both his BS degree in Biology and his PhD degree in Nutritional Sciences from the Pennsylvania State University, where his graduate work focused on understanding how vitamin A status and inflammation affected retinoic acid metabolism. Additionally, mathematical modeling was utilized to study the effects of retinoic acid supplementation on whole-body vitamin A kinetics. During his post-doctorate work at Penn State, he examined vitamin A kinetics, storage and disposal rates in adults from different ethnic backgrounds. In his current role at the National Dairy Council, Dr. Cifelli is involved in the development, design, initiation, management and communication of research projects on the health benefits associated with adequate dairy consumption, including those studies examining the effects of vitamins and minerals found in dairy on bone density, weight maintenance, and metabolic health.

Dr. Cifelli has authored or co-authored more than 20 peer-reviewed research manuscripts, reviews and abstracts and he is an active member of numerous scientific organizations, including the American Society for Nutrition and the Obesity Society.







Victor FULGONI,III, PhD Nutrition Impact, LLC, Battle Creek, MI, USA

Victor Fulgoni, III, is currently Senior Vice President of Nutrition Impact, LLC, which is a consulting firm that helps food companies, develop and communicate aggressive, science-based claims about their products and services. Nutrition Impact was intimately involved in filings with the US FDA that resulted in three new health and nutrition claims, namely plant sterol esters reducing heart disease, potassium reducing the risk of stroke, and claims regarding choline, the first new nutrient content claim in almost ten years. Nutrition Impact also performs analyses of government food, nutrition, and health databases like the National Health and Nutrition Examination Surveys for clients evaluating the contribution certain food and beverage products (e.g., dairy products, bean and bean products, 100% juices, etc.) make to nutrient intake and their effect on certain health parameters. Recently, Nutrition Impact has worked with the Nutrient Rich Foods Coalition helping to develop and validate various approaches to a nutrient density scoring system for foods.

Prior to joining Nutrition Impact, Dr. Fulgoni worked for the Kellogg Company as Vice President of Food and Nutrition Research. At Kellogg he helped develop their long-term research program and was intimately involved in the company's research and regulatory efforts to gain health claim approval from the US FDA regarding soluble fiber from psyllium and the risk of heart disease. Dr. Fulgoni completed his Bachelors degree at Rutgers University and his PhD at the University of Tennessee with a major in animal nutrition and a minor in statistics.







Andres PICHON-RIVIERE, MD Msc PhD Institute for Clinical Effectiveness and Health Policy (IECS), Buenos Aires, Argentina

Prof. Andres Pichon-Riviere MD Msc PhD, is a Physician, graduated from the University of Buenos Aires (UBA). He has a Master of Sciences in Clinical Epidemiology from Harvard University and a PhD in Public Health (UBA). He received training in disease modeling and economic evaluation methods at University or York and the London School of Hygiene and Tropical Medicine.

Andres is the Executive Director and Director of the Health Technology Assessment and Economic Evaluations Department of the Institute for Clinical Effectiveness and Health Policy (IECS). The IECS is an independent, non-for-profit organization devoted to research, education and technical support with the main goal of improving efficiency, equity, and quality of health care systems and policies in Argentina and Latin America. IECS is one of the leading Latin American Health Technology Assessment (HTA) Agencies, with more than 300 HTA reports published in the last ten years and indexed in the Centre for Reviews and Dissemination Database. He is also Professor of Public Health at the University of Buenos Aires and Director of the courses of HTA for Decision Makers, HTA Postgraduate Course, and Economic Evaluation Modeling Introductory Course.

He has conducted several training and research projects in HTA and health economic evaluations in cooperation with government agencies, academic and private institutions in Argentina, Bolivia, Brazil, Chile, Colombia, Mexico, Panama, Peru, Uruguay, and Venezuela. In 2008 was awarded the Global Health Leadership Award from the Global Health Research Initiative to promote HTA in Latin America.

Since 2010 he is Vice-Chair of the International Network of Agencies for Health Technology Assessment (INAHTA) and Director of Health Technology Assessment International (HTAi).

His recent work has involved studies in cost-effectiveness of vaccines, public health interventions and oncologic drugs, tobacco disease burden, priority setting mechanisms in developing countries and chronic diseases.







Mary-Ellen SANDERS, PhD Dairy & Food Culture Technologies, Centennial, CO. USA

Mary Ellen Sanders is a consultant in the area of probiotic microbiology.

Her recent focus has been on efficacy substantiation, microbiology and regulatory issues pertaining to probiotics. She has coordinated or collaborated on clinical studies to validate probiotic efficacy, served on GRAS determination panels, participated in a FAO/WHO working group to make recommendations to Codex for guidelines for use of probiotics and served on the World Gastroenterology Organisation Guidelines Committee preparing guidelines for the use of probiotics and prebiotics.

She is currently working with the Global Alliance for Probiotics, a European collaboration of seven probiotic companies addressing issues related to health claims for probiotics in the EC, and was invited to join the scientific advisory board for the American Gastroenterological Association's Center for Gut Microbiome Research and Education. She serves as executive director of the International Scientific Association for Probiotics and Prebiotics.







Francisco GUARNER, MD, PhD University Hospital Vall d'Hebron, Barcelona, Spain

Dr. Francisco Guarner graduated in Medicine at the University of Barcelona (Spain) in 1973. He trained in Internal Medicine, Gastroenterology and Hepatology at Hospital Clinic in Barcelona. He obtained a Ph.D. in Science for his research studies on liver cell cytoprotection at the University of Navarra (Spain). He has been Visiting Scientist and Research Fellow at the Upjohn Company in Kalamazoo (Michigan, 1983), the Royal Free Hospital (London, 1984), the King's College Hospital (London, 1984-1986), and the Wellcome Research Laboratories (Beckenham, 1986).

Dr. Francisco Guarner is currently Consultant of Gastroenterology at the Digestive System Research Unit and Head of the Experimental Laboratory, in University Hospital Vall d'Hebron (Barcelona). He is past-member of the Board of Directors of the International Scientific Association for Probiotics and Prebiotics, and current member of the Steering Committee of the International Human Microbiome Consortium, and the Guidelines Committee of the World Gastroenterology Organization. He is co-author of 300 publications on original research or reviews, in the field of mucosal immunity, gastrointestinal inflammation and gut microbiota.







Dennis A. SAVAIANO, PhD Honors College at Purdue University, USA

Dennis A. Savaiano is Professor of Nutrition Science and Interim Dean of the new Honors College at Purdue University. A researcher in lactose intolerance for the past 25 years, Dr. Savaiano has attempted to identify the dietary factors that can improve lactose tolerance, thus promoting adequate calcium intake for the 25% of the US population and 75% of the world's population that are lactose maldigesters.

Dr. Savaiano is a native Californian with degrees from Claremont McKenna College (BA in Biology) and the University of California at Davis (MS and PhD in Nutrition). He was a Professor in the Department of Food Science and Nutrition at the University of Minnesota from 1980 through 1995, and moved to Purdue University in 1995. He served as Dean of the College of Consumer and Family Sciences for 15 years. He became Associate Provost in 2010, working to develop new Honors and Undergraduate Colleges and was appointed Interim Dean of the newly approved Honors College in July of 2011, with responsibility to develop the new College with a target admission date for first year students of fall 2013.







Lorenzo MORELLI Institute of Microbiology – Catholic University of the Sacred Hearth, Piacenza and Cremona, Italy

Born January 1st, 1954 in Genoa, Italy.

Graduated in July 1979 in Agricultural Sciences at Faculty of

Agriculture, Catholic University of the Sacred Hearth, Piacenza.

Trainee at National Institute for Research in Dairying, Reading, U.K. (supervisor: M. Gasson)

Academic career:

- 1984: Research scientist
- 1992: Assistant professor
- 2000: Chair professor
- 4/09/2009: Director of the Institute of Microbiology and the CRB
- 1/11/2009: Dean of the Faculty of Agriculture

He was the co-ordinator of the first EU (1991) funded project devoted to probiotics (FLAIR project AGRF 0053 "Selection and characterisation of human probiotic strain") and since that time he has a track record of research activity in the field of molecular biology applied to probiotics. His research interest is focused on surface reactions of enteric lactobacilli and he was the first to isolate and characterise the proteins secreted by lactobacilli and responsible for aggregation phenotype. After his pioneering work, aggregation has been established has a relevant trait of probiotic bacteria and it is currently under investigation in several laboratories.

Molecular taxonomy of lactic acid bacteria is another field of interest: papers have been published dealing with the identification of bacteria forming the intestinal flora of new-borns, as identified by means of genetic techniques.

A third area of interest is the molecular typing of probiotic bacterial strains, in order to be able to trace the fate of bacterial cells after they have been ingested by humans. This is a really relevant point in order to establish a clear link between the persistence of bacteria into the gut and the observed probiotic effects.

Author or co-authors of more than 50 scientific papers, he also holds European and U.S. patents in the field of probiotic bacteria selection.

Research items.

1. Surface reaction and secreted proteins of probiotic lactobacilli are under investigation.

The rationale is to find out which are the components of the outer envelopes of lactobacilli possibly involved in mediating the interaction (i.e. colonization) between the bacterial cell and intestinal tissues. Surface layer protein and secreted protein able to induce aggregation are under investigation.

Genes encoding for these surface proteins have been sequenced and cloned.

Spontaneous and/or genetically modified mutants are used to assay in vitro, in animal models and (using spontaneous mutants only) in humans the role played by these surface proteins in determining probiotic properties.

- 2. Taxonomy and typing of bifidobacteria and lactobacilli used for probiotic products. PCR based methods have been developed and used to track the fate of probiotic strains during feeding trials. To trace the presence of the specific strain used is of paramount relevance in order to establish the real significance of the trials.
- 3. Intestinal microbial ecology studied with traditional and genetic (i.e. PCR, DGGE) methods.









Connie M. WEAVER, PhD College of Consumer and Family Science, Purdue University, IN, USA

Connie M. Weaver, PhD, is Distinguished Professor and Head of the Department of Nutrition Science at Purdue University, West Lafayette, Indiana.

In 2013, she was bestowed the honor of the Spirit of the Land Grant Award. In 2012 she was selected as the Herbert Newby McCoy recipient. This award is the most prestigious research honor given by Purdue University. In 2010, she was elected to membership in the Institute of Medicine of The National Academies, of which she is a member of the Food and Nutrition Board. Also, in 2010 the Women's Global Health Institute (WGHI) was formed at Purdue University with the mission of improving the health of women globally through research and training by proactively identifying the causes and prevention of diseases related to women. In 2008, she became Deputy Director of the National Institutes of Health funded Indiana Clinical and Translational Science Institute. From 2000 to 2010, she was Director of the NIH Purdue-UAB Botanical Research Center to study dietary supplements containing polyphenolics for age-related diseases.

Her research interests include mineral bioavailability, calcium metabolism, and bone health.

Dr. Weaver is past-president of American Society for Nutritional Sciences. She is on the Board of Trustees of the International Life Sciences Institute, National Osteoporosis Foundation and Science Advisory Board of Pharmavite.

For her contributions in teaching, Dr. Weaver was awarded Purdue University's Outstanding Teaching Award. Her honors include the Purdue University Health Promotion Award for Women (1993), the Institute of Food Technologists Babcock Hart Award (1997), USDA A.O. Atwater Lecture Award (2003), the NAMS/Glaxo Smith Kline Consumer Healthcare Calcium Research Award (2006), the Purdue University Sigma Xi Faculty Research Award (2006), the American Society for Nutrition Robert H Herman Award (2009), the Natural Products Association's Burton Kallman Scientific Award (2010), and the Linus Pauling Research Prize Award (2011).

Dr. Weaver was appointed to the 2005 Dietary Guidelines Advisory Committee for Americans. She has published over 260 research articles. Dr. Weaver received a Bachelor of Science and Master of Science in food science and human nutrition from Oregon State University. She received a PhD in food science and human nutrition from Florida State University and holds minors in chemistry and plant physiology.







René RIZZOLI, MD University Hospital of Geneva, Switzerland

Dr. René Rizzoli is an internist and endocrinologist, with a subspecialty focus on metabolic bone diseases, osteoporosis and disorders of mineral metabolism. He is presently professor of medicine at the University Hospital of Geneva and head of the service of bone diseases at the Geneva University Hospitals. He is the chairman of the clinical medicine section of Geneva University Faculty of Medicine.

He is involved in both basic and clinical research projects investigating hormone action, regulation of bone growth, regulation of mineral homeostasis, pathophysiology of osteoporosis and the role of nutrition, calcium, vitamin D, bisphosphonates, selective estrogen modulators, denosumab, teriparatide and strontium ranelate in the prevention and treatment of osteoporosis.

Dr. Rizzoli is author of more than 550 scientific articles. He is editor of *Bone* and associate editor of *Osteoporosis International*.







Widjaja LUKITO, MD, PhD SEAMEO Regional Centre for Food and Nutrition, University of Indonesia

Dr Widjaja Lukito serves as an Advisor to SEAMEO Regional Centre for Food and Nutrition under the auspices of the Southeast Asia Ministers of Education Organization, University of Indonesia.

He was the Director of the Center in the years 2004-2008. Since 2009, he has also been acting as the Coordinator of the ongoing development of Human Nutrition Research Cluster, Medical Education and Research Center, Faculty of Medicine, University of Indonesia, Jakarta, Indonesia.

Dr Lukito received his medical degree in 1986 from Airlangga University in Surabaya, Indonesia and his PhD in Medicine in 1995 at the Faculty of Medicine, Monash University in Melbourne, Australia.

His research interests include nutrition, aging and non-communicable diseases, and their linkages with metabolism. He is the Immediate Past-President of the Indonesia Clinical Nutrition Society, and the Past President of the Asia Pacific Clinical Nutrition Society.







André MARETTE, PhD Institute of Nutrition and Functional Foods at Laval University, Quebec city, Canada

Dr. André Marette graduated from Laval University in 1990 with a PhD in Physiology and Endocrinology. He his currently full professor in the department of Medicine and Scientific Director of the Institute of Nutrition and Functional Foods at Laval University, Québec, Canada.

Dr. Marette is an international expert on the pathogenesis of inflammation, type 2 diabetes and cardiovascular diseases in obesity. His research in the areas of insulin action and insulin resistance, and the mechanisms of inflammation, has advanced the understanding of the cellular/molecular defects leading to diabetes and opened new possibilities for nutritional and pharmacological therapeutic interventions. He has published over 130 papers in high-impact journals (*Nature Medicine, PNAS, J Biol Chem., FASEB J, Cell Metabolism, Diabetes*, etc...) and 15 reviews or book chapters.

Dr. Marette holds several national and international research grants and awards. He also holds a Pfizer Canada/CIHR research Chair in the pathogenesis of insulin resistance and cardiovascular diseases. He is currently leading a CIHR-funded team grant on the cardiovascular complications of diabetes. He is also leading a Canadian-Brazil research collaboration between Laval University and colleagues at the University of Sao Paulo on the discovery of novel extracts from Brazilian and Canadian fruits for the treatment of obesity, type 2 diabetes and cardiovascular diseases. Dr. Marette has received several awards including the prestigious Young Scientist Award of the Canadian Diabetes Association and the Charles Best Lectureship Award of the University of Toronto, both in recognition for his outstanding contribution to diabetes research.

Dr Marette has organized a number of national and international meetings and symposia and has been invited to speak at more than a 130 national and international meetings. He is currently Associate Editor at the Am J Physiol: Endocrinology & Metabolism section and also serves as internal or external referee to a number of international and national funding agencies.







Simin N. MEYDANI, DVM, PhD Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, Boston, MA, USA

Simin Nikbin Meydani, DVM, PhD, serves as the Director of the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University. She is Professor of Nutrition and Immunology at the Friedman School of Nutrition Science and Policy and the Tufts Sackler Graduate Program in Immunology.

Dr. Meydani's scientific interests include the impact of nutrition on the aging process and age-associated diseases, the role of nutrition on immune and inflammatory responses and predisposition to infectious diseases in developed and less developed countries, on which she has published extensively.

Her honors include American Aging Association, Denham Harman Lifetime Research Achievement Award; American Society of Nutrition (ASN) Herman Award in clinical nutrition; ASN Lederle Award in Human Nutrition Research; Fellow of Hedwig van Amerigen Executive Leadership in Academic Medicine; American College of Nutrition Grace Goldsmith Award; International HERMES Vitamin Research Award; International Nutritional Immunology Group Award; Iowa State University Helen LeBaron Hilton Distinguished Alumni Award and Food Science and Human Nutrition Alumni Impact Award; Tufts University Outstanding Faculty Award (1995, 1997).

She has served the academic/clinical community as: Vice-President, elect of the ASN; President of the American Aging Association; member of the ASN strategic oversight committee, member of NIH Geriatric Rehabilitation Study Section, Aging Systems and Geriatrics Study Section, and Cellular Mechanism of Aging and Development Study Section; member of USDA Human Nutrient Requirements for Optimal Health Program Grant Review Panel; member of United Nations FAO/WHO Expert Panel on Nutritional Requirement of the Elderly, and Joint Expert Committee on Fats and Oils in Human Nutrition; Welcome Visiting Professorship at Iowa State University; member of NIH-funded Consortium Lipid Maps Scientific Advisory Committee, NIA Primate Calorie Restriction Project Advisory Board, External Advisory Committee for the UCLA Claude D. Pepper Older Americans Independence Center; Co-chair, Development Committee International Society for Executive Leadership in Academic Medicine; Gerontological Society Nutrition Steering Committee; Scientific Steering Committee of the Sackler Institute Monitoring and Evaluation Group, NYAS; member of the Editorial Boards of several journals; chair of several FASEB summer conferences and other international meetings.







Angelo TREMBLAY, PhD
Department of Kinesiology, Laval University,
Quebec City, Canada

Angelo Tremblay is currently professor at the Department of Kinesiology at Laval University, Quebec City, from where he obtained his undergraduate (BSc in Education) and postgraduate degrees (MSc in Nutrition and PhD in Physiology) between 1974 and 1982.

Dr. Tremblay's department has an international reputation in obesity research and his own particular interests are focused primarily on the environmental determinants of obesity in humans. He has published over 550 scientific papers. He is holder of the Canada Research Chair in Environment and Energy Balance







Frans KOK, PhD Division of Human Nutrition, Wageningen University, The Netherland

Frans Kok (1950) is professor in Nutrition & Health and director of the Division of Human Nutrition at Wageningen University, The Netherlands. Kok was trained in human nutrition in Wageningen and epidemiology at Harvard University, Boston USA.

Kok's scientific research covers topics such as diet in disease prevention, dietary behavior, and overweight. In emerging economies in Asia and Africa attention is on diet and deficiency disorders. He is author of some 300 scientific publications (H-index = 54), and was promoter of 65 PhD graduates. Frans Kok is editor of three nutrition textbooks.

From 2006-2010 he acted as dean of Wageningen graduate schools being responsible for the quality of academic research and postdoctoral training. He has been member of the Academic Board of Wageningen University for more than 10 years.

Kok is member of several (inter)national scientific committees. He chaired the Dutch National Health Council committee responsible for the 2006 Dietary Guidelines for the Netherlands.

Kok presents and lectures on nutrition and health topics at many (popular)scientific (inter)national symposia, masterclasses, and the media.







Paul F. JACQUES, ScD

Jean Mayer USDA Human Nutrition Research
Center on Aging at Tufts University, Boston, MA,
USA

Paul F. Jacques, ScD, is the Director of the Nutritional Epidemiology Program and Senior Scientist at the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University and Professor at the Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy at Tufts University.

Since receiving his doctoral degree in Epidemiology from the Harvard School of Public Health 25 years ago, Dr. Jacques has applied his knowledge of epidemiology to the study of nutrition and aging. His research has examined the role of nutrition in age-related disorders such as atherosclerosis, diabetes, cataract, osteoarthritis and dementia. Dr. Jacques is the author of more than 230 original, peer-reviewed research articles and dozens of editorials, book chapters and reviews on nutrition and aging. He has extensive experience working with large cohorts and surveys including the Framingham Heart Study, the Family Heart Study, the National Health and Nutrition Examination Survey, and the Nutritional Status Survey of Boston-area Elderly. Dr. Jacques has also been involved in a number of randomized, placebo-controlled intervention studies examining metabolic and health consequences of altered nutritional status.

Dr. Jacques' current research includes the examination of the role of diet on metabolic markers of diabetes and cardiovascular disease risk, with an emphasis on whole grains, low fat dairy and flavonoids; the impact of FDA-mandated folic acid fortification of enriched cereal-grain products on folate status and health of Americans, with an emphasis on the effect of high folate intake in the presence of low vitamin B12 status; and the relation between dietary patterns, diet quality and risk of chronic disease.







Arne ASTRUP, PhD

Dpt of Nutrition, Exercise and Sports, Faculty of Science, University of Copenhagen, Denmark

Arne Astrup is Head of The Department of Nutrition, Exercise and Sports at The Faculty of Science, University of Copenhagen, Denmark. He is Director of the OPUS Research Centre 2009-13 funded by the Nordea Foundation (total grant of 15 mill. €).

Arne Astrup was created Knight of the Order of Dannebrog in 1999, and Knight of the First Order of Dannebrog in November 2012.

Astrup attained his medical degree from the University of Copenhagen in 1982 and a Doctorate in Medical Science in 1986. He was appointed Professor of Nutrition at the Research Department on Human Nutrition at the Royal Veterinary and Agricultural University, Denmark in 1990. His main areas of interest include the physiology and pathophysiology of energy and substrate metabolism, with special emphasis on the etiology and treatment of obesity. Major research collaborations include participation in the EU multicenter studies EUROSTARCH, CARMEN, NUGENOB, DIABESITY, DIOGENES, EMOB, and HEALTHGRAIN. He is author/co-author of over 460 peer-reviewed original, review, and editorial publications, a number in journals such as *The Lancet, New England Journal of Medicine, Nature, British Medical Journal*, and *Journal of Clinical Investigation*; and over 900 other scientific publications (textbook chapters, abstracts and letters). Citation H-index: 62. Thomson Reuters Science Index 2010: 5th for obesity publications.

Arne Astrup is currently Associate Editor of American Journal of Clinical Nutrition and member of the Editorial Board of Annual Reviews of Nutrition. He was founding Editor-in-Chief of Obesity Reviews in 1999, stepping down in December 2010. He was President of The International Association for the Study of Obesity (IASO) 2006-2009 and Chairman 2009-2010.

Academic honours include Servier's Award for Outstanding Obesity Research 1990; IASO André Mayer Award 1994; Danone Chair in Nutrition 2002 at The University of Antwerp; LIFE Communication Prize 2007; International Association of Business Communicators' EME Excel Merit Award for Communication Leadership 2009; LIFE Innovations Award 2010; Nutrition & Santé Weight Management Award (France) 2010; Finnish Association of Internal Medicine Esko Nikkilä Prize 2012; American Society for Nutrition Robert H. Herman Award 2012; Danish Communication Association KomPris´12 to the OPUS Research Centre 2012.

Arne Astrup is currently consultant or member of advisory boards for a number companies, including: Arena Pharmaceuticals Inc., USA; Basic Research, USA; BioCare Copenhagen, DK; Dutch Beer Knowledge Institute, NL; Global Dairy Platform, USA; Jenny Craig, USA; MacDonald's, USA; Novo Nordisk, DK; Orexigen Therapeutics Inc., USA; Pathway Genomics Corporation, USA; Rhythm Pharmaceuticals, USA; S-Biotek, DK; Twinlab, USA; Vivus Inc., USA. He is recipient of honoraria as speaker for a wide range of Danish and international concerns.







David GROTTO, RD, LDN Nutrition Housecall LLC, Chicago, IL, USA

David Grotto, RD, LDN's entrée into the world of nutrition started over twenty-five years ago when he began working in the natural foods industry at the age of 14. After owning and operating his own natural food store for eighteen years, Dave decided to become a registered dietitian and attended the University of Illinois at Chicago. He is now completing his Masters in Nutrition and Wellness at Benedictine University.

Dave hosted his own live radio show on health and nutrition for over 10 years and also hosted a local health-focused television show for two years. Dave proudly served as a national media spokesperson for the Academy of Nutrition and Dietetics (formerly the American Dietetic Association) for over six years.

Currently, Dave is the president and founder of Nutrition Housecall LLC, a nutrition consulting firm based in Chicago that provides nutrition communications, speaking, and consulting services. He is also in private practice providing unique at-home diet and lifestyle counseling for families.

Dave wrote the acclaimed book, **101** Foods That Could Save Your Life which is now out in eighteen different languages. His second book, **101** Optimal Life Foods, with a foreword written by Montel Williams, debuted in January of 2010 and his latest book, **Best Things You Can Eat**, published in January 2013. Dave is also a freelance writer and serves as an advisor to Fitness magazine plus blogs each week for the Real Nutrition community featured on WebMD.

Dave loves to laugh and lectures extensively on the health benefits of humor and laughter. He received additional training in humor therapy and is a Certified Laughter Leader. He also attended The Second City in Chicago receiving further training in improvisation

Dave lives in the Chicagoland area with his wife Sharon; three daughters Chloe, Katie and Madison; two-female dogs Abbey and Gracie and his two female cats Bella and Lilly. He feels he is an expert in unopposed estrogen.







Johanna DWYER Tufts University Medical School, Boston, MA, USA

Dr. Johanna Dwyer is Professor of Medicine (Nutrition) and Community Health at the Tufts University Medical School, and Professor of Nutrition at Tufts University Friedman School of Nutrition Science and Policy. She is also Senior Scientist at the Jean Mayer/USDA Human Nutrition Research Center on Aging at Tufts University. Her major research interest is in flavonoids, population based nutrition surveys, and nutrition policy. Dr. Dwyer is the Director of the Frances Stern Nutrition Center at Tufts Medical Center which is one of the oldest dietetic internship programs and outpatient nutrition clinics in the USA. She served as Dietetic Internship Director there from 1974 to 2009. From 2003-2011, Dr. Dwyer served part time as Senior Nutrition Scientist, Office of Dietary Supplements, National Institutes of Health. She now serves as a Scientific Consultant in the same capacity where she is responsible for several large projects, including studies of dietary supplement motivation and use, development of an analytically substantiated dietary supplement database and other dietary supplement databases, development of research on the assessment of dietary supplement intake and other topics, including national population-based surveys.

Dwyer received her D.Sc. and M.Sc. from the Harvard School of Public Health, an M.S. from the University of Wisconsin, and completed her undergraduate degree with distinction from Cornell University. She is the author or coauthor of more than 250 research articles and 300 review articles published in scientific journals on topics including dietary treatment of end-stage renal disease, the role of dietary flavonoids in health; preventing diet-related disease in children and adolescents; maximizing quality of life and health in the elderly; vegetarian and other lifestyles, and databases for bioactive substances other than nutrients. She also serves as the editor of *Nutrition Today*.

Dr. Dwyer has served on many committees, including the 2000 Dietary Guidelines for Americans Committee. She served as a member of the Food and Nutrition Board of the National Academy of Sciences, was elected member of the Institute of Medicine National Academy of Sciences in 1998, and served as Councilor of the Institute of Medicine from 2001-2003. She received the Conrad V Elvejhem Award for public service in 2005 from the American Society for Nutrition Sciences, the Alumni Award of Merit from the Harvard School of Public Health in 2004, the WO Atwater award in 1996, the Medallion Award of the American Dietetic Association in 2003 and was recently honored with the Dean's Medal from the Tufts University Friedman School of Nutrition Science and Policy.







Luis MORENO, PhD Public Health, University of Zaragoza, Spain

Luis A. Moreno is Professor of Public Health at the University of Zaragoza (Spain). He is also Visiting Professor of Excellence at the University of Sao Paulo (Brazil).

He did his training as Medical Doctor and his PhD thesis at the University of Zaragoza. He studied Human Nutrition and Public and Community Health at the University of Nancy (France).

He has participated in several research projects supported by the Spanish Ministry of Health, and the European commission (HELENA, IDEFICS, EURRECCA, ENERGY, ToyBox and iFamily).

He has published more than 250 papers in peer reviewed journals. He is a former member of the ESPGHAN Committee of Nutrition.







Bruce GERMAN, PhD
Foods for Health Institute, University of California
Davis, CA, USA

Bruce German received his PhD from Cornell University, joined the faculty at the University of California, Davis in 1988, in 1997 was named the first John E. Kinsella Endowed Chair in Food, Nutrition and Health is currently Director of the Foods for Health Institute and professor, at University of California, Davis. His research interests include the structure and function of dietary lipids, the role of milk components in food and health and the application of metabolic assessment to personalizing diet and health.

The goal of his research is to build the knowledge necessary to improve human health through personalized health measurements and foods. Research projects directed to this goal are studying how individual human lipid metabolism responds to the chemical composition and structural organization of foods. Each person has slightly different responses to diet based on their genetics, their lifestage and lifestyle, their metabolism and their nutrition status. It is thus necessary to understand the molecular basis of these differences, how to measure them and design food strategies to complement them. We are working on analytical strategies to enable individuals to monitor how their body reacts to various foods and to modify their consumption to maintain good health. With health targets established it is the equally important task of the research to understand how to provide superior choices in foods that integrate the compositional, structural and nutritional functionalities of biomaterials. The model being used of how to proceed is milk, the product of millennia of constant Darwinian selective pressure to produce a food to nourish, sustain and promote healthy infant mammals to be healthier. Milk is the only bio-material that has evolved for the purpose of nourishing growing mammals. Survival of offspring exerted a strong selective pressure on the biochemical evolution of lactation as a bioguided process. Just as evolution of any biological organism, the strong survive, which leads to the appearance of new traits that promote health, strength and ultimately survival. This evolutionary logic is the basis of the research program to discover physical, functional and nutritional properties of milk components and to apply these properties as principles to foods.

Bruce and colleagues have published more than 350 papers on lipids and food, metabolism and metabolite measurements and food functions and patented various technologies and applications of bioactive agents.















