

2009 ISNFF Conference and Exhibition
Golden Gateway Holiday Inn Hotel, San Francisco, CA
November 1–4, 2009

November 1, 2009

Registration (3:00 – 6:00 pm)

November 2, 2009

Plenary I (8:30 – 10:00 am)

Moderator: Fereidoon Shahidi, Memorial University, St. John's (Canada)

1. FUNCTIONAL FOODS OF THE FUTURE: GAZING INTO THE CRYSTAL BALL
Peter Jones, Richardson Functional Food and Nutraceutical Centre, University of Manitoba (Canada)
2. DHA/EPA OMEGA-3S FOR CARDIOPROTECTION: UPDATE 2009
Bruce Holub, University of Guelph (Canada)
3. OPPORTUNITIES AND CHALLENGES IN COMMERCIALIZING FUNCTIONAL FOOD INGREDIENTS
Robert Orr, Ocean Nutrition Canada (Canada)

Nutrition Break: 10:00 – 10:30 am
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Session 1: Bioactives and Healthy Brain Aging (10:30 am – 12:30 pm)

Moderator/Organizer: James A. Joseph, Tufts University and USDA, Boston, MA (USA)

4. NEUROINFLAMMATION AND PHARMACOLOGICAL APPROACHES TO RESTORE NEURONAL MICROGLIA COMMUNICATION
Susanna Rosie, University of California, San Francisco, CA (USA)
5. MECHANISMS OF ACTION IN BENEFICIAL EFFECTS OF BERRIES AND WALNUTS IN AGING
James A. Joseph, Tufts University and USDA, Boston, MA (USA)
6. FUNCTIONAL FRACTIONATION AND NUTRACEUTICAL DEVELOPMENT: ALASKA WILD BLUEBERRIES AND NEUROINFLAMMATORY SIGNALING
Sally J. Gustafson, Brian M. Barth Kriya L. Dunlap, Shane A. Rideout and
Thomas B. Kuhn, University of Alaska Fairbanks, Fairbanks, AK (USA)
7. BIOAVAILABLE CURCUMIN AND DHA FOR ALZHEIMER'S PREVENTION
Gregory M. Cole, UCLA, Los Angeles, CA (USA)

8. ANTI-AGING AND ANTI-ALZHEIMER DISEASE: EFFECTS OF SELECTED PLANT EXTRACTS
Cheng-Chang Ho and Lucy Sun Hwang, Taiwan National University (Taiwan)
9. NEUROPROTECTIVE EFFECTS AND MOLECULAR MECHANISMS OF CITRUS FLAVONOIDS AGAINST OXIDATIVE DAMAGE IN PC12 CELLS
Gow-Chin Yen and San-Long Hwang, National Chung Hsing University (Taiwan)

Session 2: Probiotics/Probiotics and Health: Delivery Systems, Applications, Opportunities and Challenges I (10:30 – 11:50 am)

Moderator/Organizer: David Kyle, Kyle Consulting (USA)

10. ENHANCED SURVIVAL OF PROBIOTICS AT AMBIENT TEMPERATURES AND INTERMEDIATE WATER ACTIVITIES
Luz Sanguansri and Mary Ann Augustin, CSIRO (Australia)
11. A NOVEL PRESERVATION AND DELIVERY TECHNOLOGY FOR LIVE PROBIOTICS
Elizabeth Raditsis, Advanced BioNutrition Corp., Columbia, MD (USA)
12. THE STABILITY OF PROBIOTICS IN POWDER PRODUCTS
Fumiaki Abe, Food Science and Technology Institute, Morinaga Milk Industry (Japan)
13. MICROENCAPSULATED PROBIOTICS BACTERIAL CELLS FOR COLON CANCER PREVENTION AND THERAPY
Saty Prakash, Faculty of Medicine, McGill University (Canada)

Session 3: Oxidative Processes and Antioxidants in Functional Food Ingredients and their Health Effects (10:30 am – 12:10 pm)

Moderators: Mogens L. Andersen, Copenhagen University (Denmark) and Rui-Hai Liu, Cornell University (USA)

14. PROTECTION OF FUNCTIONAL COMPONENTS IN FOODS AGAINST OXIDATION
Mogens L. Andersen, Copenhagen University (Denmark)
15. HOW MUCH DO WE KNOW ABOUT THE EFFECT OF OXIDIZED CHOLESTEROL AND PHYTOSTEROLS ON BLOOD LIPOPROTEINS?
Zhen-Yu Chen, The Chinese University of Hong Kong (China)
16. FRUIT PHYTOCHEMICALS FOR CANCER PREVENTION
Rui-Hai Liu, Cornell University (USA)
17. NEUROEFFICIENCY AND ANTIOXIDANT FUNCTIONS OF FERMENTED PAPAYA PREPARATIONS
O.I. Aruoma, M-C. Lee, L. Migliore and Y. Hayashi, Touro University, New York, NY (USA)

Lunch Break Sponsored by Amino Up – 12:30 – 2:00 pm

Luncheon Speaker:

Dr. Jun Nishihira, Hokkaido Information University (Japan)

DISCOVERY OF NOVEL FUNCTIONS OF LOW-MOLECULAR-WEIGHT POLYPHENOLS (OLIGONOL) BEYOND ITS ANTIOXIDANT ACTION

Session 4: Nutraceutical Proteins and Peptides (2:00 - 3:20 pm)

Moderators/Organizers: M. Murakashi, Lion Corporation (Japan) and Kazuo Miyashita, Hokkida University (Japan)

18. EFFECT OF ENTERIC-COATED LACTOFERRIN ON VISCERAL FAT ACCUMULATION AND METABOLIC SYNDROME RISK IN MEN AND WOMEN WITH ABDOMINAL OBESITY
Michiaki Murakshi, Lion Corporation (Japan)
19. RECENT ADVANCES IN THE RD ACTIVITIES ON THE PLASMA GLUCOSE-LOWERING LUPIN SEED PROTEIN
Marcello Duranti, University of Milan (Italy)
20. BIOACTIVE PEPTIDES FROM AQUATIC FOOD BY-PRODUCTS
Hordur G. Kristinsson, Matis (Iceland Food and Biotechnology Research) (Iceland)
21. SOYBEAN BETA-CONGLYCININ REDUCES SERUM TRIGLYCERIDE LEVEL BY REINFORCING INSULIN SENSITIVITY
Nobuhiko Tachibana, Food Science Institute, Fuji Oil Co., Ltd. (Japan)

Session 5: Probiotics/Probiotics and Health: Delivery Systems, Applications, Opportunities and Challenges II (2:00 – 3:20 pm)

Moderator/Organizer: David Kyle, Kyle Consulting (USA)

22. PROBIOTICS: INDUSTRIAL CHALLENGES AND OPPORTUNITIES
Greg Leyer, Danisco USA Inc., Madison, WI (USA)
23. MARKETING CHALLENGES PERTAINING TO PREBIOTICS AND PROBIOTICS
Reza Afkhami, Sprim Advanced Life Sciences, Plato, TX (USA)
24. PROBIOTICS FOODS, A HEALTHY IDEA!
Joanie Dion, Lallemande, Nutritional Food Ingredients, Montréal (Canada)
25. PROBIOTICS AS A FUNCTIONAL INGREDIENT: CHALLENGES, OPPORTUNITIES AND THE PROMISE OF TOMORROW
Brian Peeters, Health and Nutrition Division, Chr. Hansen A/S (USA)

Session 6: Nuts, Co-products and Beyond: Health Promotion and Disease Risk Reduction (2:00 – 3:40 pm)

Moderator: Cesarettin Alasalvar, TUBITAK Marmara Research Centre (Turkey)

26. NATURAL ANTIOXIDANTS AND PHYTOCHEMICALS IN TREE NUTS
Cesarettin Alasalvar, TUBITAK Marmara Research Centre, Food Institute (Turkey)
27. THE PHYTONUTRIENTS OF PEANUT SKINS: AN UNTAPPED RESOURCE
Ronald B. Pegg, Brian D. Craft, Ryszard Amarowicz, Diane K. Hartle, James L. Hargrove, and Phillip Greenspan, The University of Georgia, Athens, GA (USA)
28. ALMOND SKIN: A COMMERCIAL FUNCTIONAL BY-PRODUCT WITH HEALTH BENEFITS
Karen Lapsley and Guangwei Huang, Almond Board of California. Modesto, CA (USA)
29. NUTS AND HEALTH
Cyril Kendal, St. Michael's Hospital and the University of Toronto, Toronto, ON (Canada)
30. POLYPHENOLS IN NUTS WITH POTENTIAL HEALTH BENEFITS
Joe Vinson, Yuxing Cai, Joseph Marchegiani, Mathew Rose and Kristen Erk, University of Sacramento, Sacramento, CA (USA)

Nutrition Break 3:40 – 4:00 pm

Session 7: Market Status, Regulations and Health Claims for Nutraceuticals, Natural Health Products and Functional Food Ingredients (4:00 – 6:00 pm)

Moderator: Jerzy Zawistowski, University of British Columbia (Canada)

31. PROPOSED CHANGES TO FUNCTIONAL FOOD REGULATIONS IN CANADA
Kelley Fitzpatrick, NutriTech Consulting, Winnipeg (Canada)
32. THE CHALLENGE OF DETERMINING APPROPRIATE RISK STATEMENTS FOR NATURAL HEALTH PRODUCTS
Michael Steller, Natural Health Products Directorate, Health Canada, Ottawa (Canada)
33. HEALTH CLAIM SUBSTANTIATION FOR NUTRACEUTICALS, FUNCTIONAL FOODS AND DIETARY SUPPLEMENTS: A GLOBAL APPROACH
Lina Paulionis, CANTOX Health Sciences International, Mississauga (Canada)
34. THRESHOLD EVIDENCE NEEDED FOR HEALTH CLAIMS FOR FUNCTIONAL FOODS
Jerzy Zawistowski, University of British Columbia (Canada)

35. VERIFIABLE QUALITY STANDARDS FOR THE AUTHENTICITY, IDENTITY AND QUALITY OF FOOD INGREDIENTS AND DIETARY SUPPLEMENTS
Markus Lipp, US Pharmacopeia (USA)
36. THE FUTURE AND THE PRESENT OF CLINICAL TRIALS ON FUNCTIONAL FOODS
Soo-Wan Chae, Chonbuk National University (South Korea)

**Session 8: Nutraceuticals and Natural Products in Bone and Skin Health
(4:00 – 6:20 pm)**

Moderators: Yumei Lin, Business Access Group, Nutrilite (USA) and Chin-Kun Wang, Chung Shan Medical University (Taiwan)

37. A SYSTEMATIC APPROACH IN DEVELOPING NUTRACEUTICAL SUPPLEMENTS TO REDUCE BONE RESORPTION AND ENHANCE BONE FORMATION
Yumei Lin, Mary A. Murray, Shyam. Ramakrishnan, David East, Amitabh Chandra and Kevin Gellenbeck, Access Business Group, Nutrilite, Buena Park, CA (USA)
38. NUTRACEUTICALS FOR OSTEOPOROSIS: A CASE STUDY
Han-Jung Chae, Chonbuk National University (South Korea)
39. EFFECT OF SI WU TANG ON SKIN CARE – A CLINICAL TRIAL
Chin-Kun Wang and Yin-Hua Wu, Chung Shan Medical University (Taiwan)
40. DERMATOLOGICAL EFFECTS OF FISH TYPE I COLLAGEN HYDROLYSATE ADMINISTRATION ON SKIN HEALTH
Hiroki Ohara, K. Ito, S. Ichikawa, H. Matsumoto and Y. Takeuchi
Meiji Seika Kaisha Ltd., (Japan)
41. PROTECTIVE EFFECTS OF UNDENATURED TYPE II COLLAGEN (UC-II) IN ARTHRITIC DOGS
M. Bagchi¹ and R.C. Gupta²
¹InterHealth Research Center, ²Murray State University, Murray, KY (USA)
42. SAFETY AND EFFICACY OF UNDENATURED TYPE II COLLAGEN (UC-II) IN THE TREATMENT OF OSTEOARTHRITIS (OA) OF THE KNEE: A CLINICAL TRIAL
S.P. Raychaudhuri, UC Davis, Davis, CA (USA) and VA Medical Center, Sacramento, CA (USA)
43. VITAMIN-D: THE MOST NEEDED NUTRIENT IN OUR FOOD SUPPLY – BONE HEALTH AND BEYOND
James T. Kopp, Sr., Lallemand/American Yeast (USA)

Session 9: Bioactive Peptides and Proteins (4:00 – 6:20 pm)

Moderators/Organizers: Hannu Korhonen, MTT Agrifood Research (Finland) and Kenji Sato, Kyoto Prefectural University (Japan)

44. MILK-DERIVED BIOACTIVE PEPTIDES: CURRENT RESEARCH FOCUS AND APPLICATIONS
Hannu J. Korhonen, MTT Agrifood Research Finland (Finland)
45. PLANT PROTEIN-DERIVED ANGIOTENSIN I CONVERTING ENZYME INHIBITORY PEPTIDES
Anne Pihlanto, Tessa Alanko and Sari Mäkinen, Biotechnology and Food Research, MTT Agrifood Research (Finland)
46. TOWARDS IDENTIFYING THE CHEMICAL MECHANISMS OF NON-ENZYMATIC PEPTIDE ANTIOXIDANTS
Amy K. Proulx and Rong Cao (Tsao)
Agriculture and Agri-Food Canada, Guelph (Canada)
47. PURIFICATION AND *IN-VITRO* ACTIVITIES OF RENNIN-INHIBITORY PEPTIDES PRESENT IN PEA SEED PROTEIN HYDROLYSATES
Rotimi Aluko, University of Manitoba (Canada)
48. EGG-DERIVED PEPTIDE IRW INHIBIT TNF- α -INDUCED INFLAMMATORY RESPONSE IN HUMAN UMBILICAL VEIN ENDOTHELIAL CELLS (HUVEC)
Wuyang Huang¹, Kasuatv Majmuder¹, Subhadeep Chakrabarti², Yanyan Jiang², Sandra T. Davidge² and **Jianpin Wu**¹, Department of Agricultural, Food and Nutritional Science¹ and Department of Obstetrics and Gynecology and Cardiovascular Research Group², University of Alberta (Canada)
49. BIOLOGICAL ACTIVITY OF FOOD-DERIVED PEPTIDES IN HUMAN BLOOD
Kenji Sato, Kyoto Prefectural University (Japan)
50. IDENTIFICATION OF A FOOD-DERIVED ELASTIN PEPTIDE (PRO-GLY) IN HUMAN BLOOD AFTER ORAL INGESTION OF ELASTIN HYDROLYSATE
Yasutaka Shigemura, Misako Nakaba, Eun Young Park, Yasushi Nakamura and Kenji Sato, Osaka Yuhigaoka Gakuen Junior College (Japan)

<p>Mixer Reception and Poster Presentation 7:00 – 9:00 pm</p>

November 3, 2009

Plenary II (8:30 – 10:00 am)

Moderator: Chi-Tang Ho, Rutgers University (USA)

51. DIETARY POLYPHENOLS: ABSORPTION, METABOLISM AND MECHANISMS OF ACTION
Paul Kroon, Institute of Food Research, Norwich (UK)
52. FISH OIL TO GREEN TEA TO PHYTOSTEROLS: WHY SOME FORMS WORK AND OTHERS DON'T (OR NOT AS WELL). THE BURIED TRUTH
Anthony L. Almada, IMAGINutrition, Inc. and MetaResponse Sciences, Dana Point, CA (USA)
53. GENES, NUTRITION AND HEALTHY AGING
Lester Packer, University of Southern California, Los Angeles, CA (USA)

Nutrition Break: 10:00 – 10:30 am
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Session 10: Nutraceuticals and Functional Foods in Cancer Prevention I (10:30 am – 12:10 pm)

Moderator/Organizer: Young-Joon Surh, Seoul National University (South Korea)

54. RESVERATROL AND ITS ANALOGS, ANTIOXIDANT, ANTI-INFLAMMATORY AND ANTI-CARCINOGENIC PROPERTIES
Young-Joon Surh, Seoul National University (South Korea)
55. CURCUMIN AS A REGULATOR OF WNT SIGNALING IN HUMAN PROSTATE CANCER
Marc Diederich, LBMCC (Luxembourg)
56. DIALLYLTRISULFIDE – GARLIC AND A POTENTIAL CHEMOPREVENTIVE AGENT
Hye-Kyung Na, Sungshin Women's University (South Korea)
57. ANTI CANCER EFFECTS OF TOCOTRIENOL IN COLON ADENOCARCINOMA CELLS
S. Wada, M. Kawai, Y. Matsushita, E. Minami, Y. Naito and T. Yoshikawa
Kyoto Prefectural University (Japan)
58. LEMON BIOACTIVE LIMONOID AGLYCONES INDUCES BREAST CANCER CELL ARREST BUT NOT APOPTOSIS
JinHee Kim, G.K. Jayaprakasha and **Bhimanagouda S. Patil**
Texas A & M University, College Station, TX (USA)

**Session 11: Omega 3 Oils, Marine Nutraceuticals and Functional Food Ingredients
(10:30 am – 12:10 pm)**

*Moderators/Organizers: **Colin Barrow**, Deakin University (Australia) and **Jaroslav Kralovec**, Ocean Nutrition Canada (Canada)*

59. ADVANCES IN MARINE-DERIVED FUNCTIONAL FOOD INGREDIENT DEVELOPMENT
Colin Barrow, Deakin University (Australia)
60. AN OVERVIEW OF GLOBAL R & D ACTIVITIES IN MARINE NUTRACEUTICALS
Chong M. Lee, University of Rhode Island, Kingston, RI (USA)
61. RESEARCH AND DEVELOPMENT TRENDS FOR MARINE NUTRACEUTICALS IN KOREA
Se-Kwon Kim, Pukyong University (South Korea)
62. PRODUCTION OF OMEGA-3 FATTY ACID CONCENTRATES FROM FISH AND ALGAL OILS
Jaroslav Kralovec, Ocean Nutrition Canada (Canada)
63. BIOACTIVE PEPTIDES AND FUNCTIONAL PROTEIN HYDROLYSATES FROM SEAFOODS
Eunice Li-Chan and **Anusha Samaranayake**, University of British Columbia (Canada)

**Session 12: Flaxseed: A Multiple Source of Novel Bioactive Ingredients
(10:30–11:50 am)**

*Moderator: **Kelley Fitzpatrick**, NutriTech Consulting, Winnipeg (Canada)*

64. FLAXSEED AND HUMAN HEALTH: OMEGA-3 AND BEYOND
Kelley Fitzpatrick, NutriTech Consulting, Winnipeg (Canada)
65. FLAX LIGNANS: NEW OPPORTUNITIES FOR FUNCTIONAL FOODS
Alister Muir, Agriculture and Agri-Food Canada, Saskatoon (Canada)
66. AFFECT OF EXTRUSION ON FLAXSEED LIGNAN AND OMEGA-3 STABILITY
Clifford Hall, North Dakota State University, Fargo, ND, (USA)
67. ALA-CONTAINING OILS ARE EXCELLENT SOURCES OF DIETARY N-3 FATTY ACIDS: WHAT KINETICS TEACHES US
Eric J. Murphy, University of North Dakota, Grand Forks, ND (USA)

Lunch Break /Poster Presentations (12:10 – 2:00 pm)

**Journal of Functional Foods Editorial Board Meeting
Annual General Meeting**

Session 13: Nutrigenomic, Proteomic and Metabolomic (2:00–3:40 pm)

Moderators/Organizers: Ahmed El-Sohemy, University of Toronto (Canada) and Rickey Yada, University of Guelph & AFMNet (Canada)

68. APPLYING GENOMICS TO FUNCTIONAL FOODS AND HEALTH RESEARCH
Ahmed El-Sohemy, University of Toronto (Canada)
69. INDIVIDUAL DIFFERENCES IN RESPONSE TO PLANT BIOACTIVES: IMPACT OF HUMAN AND BACTERIAL GENETICS
Johanna W. Lampe, Fred Hutchinson Cancer Research Center, Seattle, WA (USA)
70. NUTRITIONAL EPIGENOMICS: CAN GENE FUNCTIONAL BE REPROGRAMMED WITH DIET?
Raymond L. Rodriguez, UC Davis, Davis, CA (USA)
71. GENETIC DETERMINANTS OF SERUM ASCORBIC ACID CONCENTRATIONS
Leah Cahill, University of Toronto (Canada)
72. NUTRITION AND METABOLOMICS: BRINGING PERSONALIZED DIET AND HEALTH TO PRACTICE
J. Bruce German, UC Davis, Davis, CA (USA)

Session 14: Marine Algae (2:00–3:20 pm)

Moderators: Steven Feng Chen, The University of Hong Kong (Hong Kong) and Yvonne Yuan, Ryerson University (Canada)

73. ALGAE AS A SOURCE OF NUTRACEUTICALS AND FUNCTIONAL FOODS
Steven Feng Chen, The University of Hong Kong (Hong Kong, China)
74. MYCOSPORINE-LIKE AMINO ACID (MAA) PROFILES AND ANTIOXIDANT ACTIVITIES OF SELECTED WILD AND CULTIVATED RED ALGAE FROM NOVA SCOTIA AND NEW BRUNSWICK, CANADA
Yvonne Yuan, Nicole P. Yuen and Stephanie K. Hill, Ryerson University (Canada)
75. INHIBITORY EFFECT OF PHLOROTANNIN FROM EDIBLE BROWN ALGA, *ECKLONIA CAVA*, ON 3T3-L1 ADIPOCYTE DIFFERENTIATION
Chang-Suk Kong and Se-Kwon Kim, Pukyong National University (Korea)
76. SCREENING OF NATIVE SEAWEEDES OF THE US NORTHEAST COAST FOR PHENOLIC ANTIOXIDANT MEDIATED TYPE 2 DIABETES MANAGEMENT
Emmanouil Apostolidis and Chong Min Lee
University of Rhode Island, Kingston, RI (USA)

Session 15: Nutraceuticals and Functional Foods in Cancer Prevention II (2:00–3:20 pm)

Moderator: Min-Hsiung Pan, National Kaohsiung Marine University (Taiwan)

77. INHIBITORY EFFECT OF ZERUMBONE ON PROSTATE CANCER METASTASIS IN A MOUSE MODEL
Han-Hsin Chang, Bo-Yie Chen, Tin-Ting Chen, David Pei-Cheng Lin and Chung Shan Medical University (Taiwan)
78. STUDIES ON THE ANTI-TUMOR MECHANISMS OF GARCINOL INDUCED CYCLIN D3 REGULATION IN HUMAN BREAST CANCER CELLS
Yuan-Soon Ho, Taipei Medical University (Taiwan)
79. PTEROSTILBENE INHIBITED TUMOR INVASION VIA SUPPRESSING MULTIPLE SIGNAL TRANSDUCTION PATHWAYS IN HUMAN HEPATOCELLULAR CARCINOMA CELLS
Min-Hsiung Pan, National Kaohsiung Marine University (Taiwan)
80. PTEROSTILBENE INDUCES AUTOPHAGIC CELL DEATH IN BOTH SENSITIVE AND CHEMORESISTANT HUMAN BLADDER CANCER CELLS
Ying-Jan Wang and Rong-Jane Chen, National Cheng Kung University Medical College (Taiwan)

<p>Nutrition Break: 3:40 – 4:00 pm</p>

Session 16: Nutraceuticals and Functional Foods in Type-II Diabetes (4:00 – 5:40 pm)

Moderator/Organizer: Wallace Yokoyama, USDA, Albany, CA (USA)

81. BLOOD GLUCOSE VARIABILITY, GLYCEMIC INDEX AND APPETITE: IMPACT OF NOVEL POLYSACCHARIDES
Michael Lyons, Canadian Centre for Functional Medicine, University of British Columbia (Canada)
82. DIET-BETES-DIET EFFECTS ON TYPE-II DIABETES
Paul Davis, UC Davis, Davis, CA (USA)
83. LOW GLYCEMIC INDEX DIETS AND DIABETIC CONTROL
Cyril W.C. Kendal, St. Michael's Hospital, University of Toronto and University of Saskatchewan (Canada)
84. BLUEBERRY SUPPLEMENTED – HIGH FAT DIET AND HEPATIC AND ADIPOCYTE GENE EXPRESSION IN HAMSTERS
Hyunsook Kim, Agnes M. Rimando, Glenn Bartley, and Wallance Yokoyama USDA, ARS, Albany, CA (USA)
85. INSULIN SENSITIZING EFFECTS OF EPIGALLOCATECHIN 3-GALLATE IN MICE IS ASSOCIATED WITH ALTERED MICROFLORA AND IMPROVED GUT INTEGRITY
Mark K. Shigenaga, John Gieng, and Frances Cho Children's Hospital Oakland Research Institute (USA)

Session 17: Functional Beverages in Health Promotion (4:00 – 5:40 pm)

Moderators: Clare Hasler, UC Davis (USA) and Hyong Joo Lee, Seoul National University (South Korea)

86. WINE AS A FUNCTIONAL BEVERAGE FOR OPTIMAL HEALTH
Clare Hasler, UC Davis, Davis, CA (USA)
87. FLAVOR CHALLENGES IN FUNCTIONAL AND NUTRACEUTICAL BEVERAGES
Keith Cadwallader, University of Illinois, Urbana-Champaign, IL (USA)
88. MOLECULAR MECHANISMS OF HEALTH-PROMOTING EFFECTS OF CACAO PROCYANIDINS
Hyong Joo Lee, Seoul National University (South Korea)
89. WHITE, GREEN, OOLONG AND BLACK TEA – BEVERAGES WITH A MULTITUDE OF HEALTH BENEFITS
Chi-Tang Ho, Rutgers University, New Brunswick, NJ (USA)
90. CLINICAL STUDIES DEMONSTRATE THAT L-THEANIN, A NON-PROTEIN AMINO ACID, IS EFFECTIVE FOR STRESS RELEASE AND ENHANCING BRAIN FUNCTION AND MENTAL WELL BEING
Paul Sandford, NBTY, Inc., US Nutrition, Applied Science, Carson, CA (USA)

Session 18: Inventor to Investor and Business to Business Meeting (4:00-6:00 pm)

Contact Dr. Alister Muir for Participation and Details

Email: Alister.Muir@AGR.GC.CA

<p>DINNER and AWARDS PRESENTATION (7:30 – 10:00 pm)</p>

November 4, 2009

Plenary III (8:30 – 10:00 am)

*Moderator/Organizer: **Ronald B. Pegg**, University of Georgia (USA)*

91. GLOBAL AND US TRENDS AND PERSPECTIVES IN HERBAL AND PLANT-BASED SUPPLEMENTS
Mark Blumenthal, Founder and Executive Director, Editor, HerbalGram & HerbClip American Botanical Council (USA)
92. THE NIH/ODS ANALYTICAL METHODS AND REFERENCE MATERIALS PROGRAM FOR DIETARY SUPPLEMENTS: ACCOMPLISHMENTS AND FUTURE DIRECTIONS
Joseph M. Betz, National Institutes of Health (USA)
93. MOLECULAR TARGETS OF NUTRACEUTICALS DERIVED FROM DIETARY SPICES: POTENTIAL ROLE IN SUPPRESSION OF INFLAMMATION AND TUMORIGENESIS
Bharat Aggarwal, The University of Texas, MD. Anderson Center (USA)

Nutrition Break: 10:00 – 10:30 am
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Session 19: Analytical Methodologies and Quality Assurance (10:30 am – 12:10 pm)

*Moderator/Organizer: **Joseph M. Betz**, Office of Dietary Supplements, National Institute of Health, Bethesda, MD (USA)*

94. ANALYSIS OF BIOACTIVE PHYTOCHEMICALS: METHODOLOGIES AND ANALYTICAL CHALLENGES
Devanand (Dave) Luthria, Beltsville Human Nutrition Research Center, USDA/ARS, Beltsville, MD (USA)
95. NIST TOOLS FOR DIETARY SUPPLEMENT AND FUNCTIONAL FOOD ANALYSIS: STANDARD REFERENCE MATERIALS, ANALYTICAL METHOD DEVELOPMENT AND QUALITY ASSURANCE PROGRAMS
Catherine Rimmer, National Institute for Standards and Technology, Gaithersburg, MD (USA)
96. THE ROLE OF ANALYTICAL METHODS VALIDATION IN PRODUCT DEVELOPMENT AND QUALITY-CONTROL
Paula Brown, British Columbia Institute of Technology (Canada)
97. OPTIMIZATION AND VALIDATION OF A RAPID METHOD FOR THE DETERMINATION OF CATECHINS AND CAFFEINE IN GREEN TEA AND RAW MATERIALS, EXTRACTS AND DIETARY SUPPLEMENTS
Mark Roman, President, Tampa Bay Analytical Research, Inc., Largo, FL (USA)

98. ANALYTICAL METHODOLOGIES FOR COCOA FLAVONOLS
Brian Schaneberg, Mars Botanicals, Gaithersburg, MD (USA)

**Session 20: Herbal Products, Spices and Medicinal Plants in Health and Disease
(10:30–12:10 am)**

Moderators: David Kitts, University of British Columbia (Canada) and Rong Cao (Tsao), Guelph Food Research Center, Agriculture and Agri-Food Canada (Canada)

99. ANTIOXIDANT ACTIVITY OF TRADITIONAL GEORGIAN SPICES
V. Rodov, Y. Vinokur, N. Gogia and I. Chkhikvishvil, The Volcani Center (Israel)
100. CHEMICAL AND TOXICOLOGICAL CHARACTERIZATION OF STRONG ANTIOXIDANTS FROM SOME MEDICINAL AND AROMATIC PLANTS
Petras Rimantas Venskutonis, Kaunas University of Technology (Lithuania)
101. DEVIL’S CLUB: A TRADITIONAL HERB OR NEW NUTRACEUTICAL?
David Kitts, University of British Columbia (Canada)
102. ROSE PETALS AS A SOURCE OF FUNCTIONAL FOOD PRODUCTS
V. Rodov, Y. Vinkour, O. Agami, I. Roth and H. Friedman, The Volcani Center (Israel)
103. LYCHEE OLIGONOL AS AN ANTI-AGING AND INNOVATIVE NUTRITIONAL SUBSTANCE
Anil D. Kulkarni, University of Texas Health Science Centre, Houston, TX (USA)
104. PRENYLATED FLAVONOIDS: ANTIOXIDANT, ANTI-CANCER ACTIVITIES AND BIOAVAILABILITY
Rong Cao (Tsao), Guelph Food Research Centre, Agriculture & Agri-Food Canada (Canada)

**Session 21: FRUITS, CEREALS AND OTHER PLANT PRODUCTS IN HEALTH AND DISEASE
(10:30 am – 12:30 pm)**

Moderators: Bhimu Patil, Texas A & M University, College Station, TX (USA) and Amin Ismail, Universiti Putra Malaysia (Malaysia)

105. APPLE OR PINEAPPLE? THE IMPORTANCE TO BE REACTIVE IN THE PROTECTION FROM FREE RADICALS
Monica Rossetto, Paola Vanzani, Veronica De Marco, Lucio Zennaro, Marina Scarpa and Adelio Rigo, University of Padova (Italy)
106. POLYPHENOLS: DIETARY SOURCES AND INTAKE IN FINLAND
Pirjo Mattila, Marja-Leena Ovaskainen, Jarkko Hellström and Riitta Törrönen, MTT AgriFood Research Finland (Finland)
107. COMMERCIAL, REGULAR- VS. WHOLE-WHEAT SPAGHETTI: THEIR PHENOLIC COMPOUNDS AND ANTIOXIDANT ACTIVITY
Rhanissa Hirawan and Trust Beta, University of Manitoba (Canada)

108. BAMBANGAN (*MANGIFERA PAJANG*) FRUIT: A SOURCE OF NUTRACEUTICALS AND FUNCTIONAL FOODS FOR IMPROVING CVD BIOMARKERS
Ismail Amin, I. Muhamad, A. Azrina and H. Azizah
 Universiti Putra Malaysia (Malaysia)
109. NUTRITIONAL CONTENT AND ANTIOXIDANT CAPACITY IN TEN CULTIVARS AND LINES OF PRICKLY PEAR CACTUS FRUIT
Elhadi M. Yahia and Candelario Mondragon-Jacobo, Universidad Autonoma de Queretaro (Mexico)
110. CHARACTERIZATION AND IDENTIFICATION OF ANTIOXIDANT POLYPHENOLS IN MAPLE SYRUP
Mamdouh M. Abou-Zaid¹, Constance Nozzolillo², Amanda Tonon¹, Melonie Coppens¹ and Dominic Lambardo¹, Natural Resources Canada¹ and University of Ottawa² (Canada)

<p>Lunch Break/Poster Presentations (12:30 pm – 1:30 pm)</p>

**Session 22: Antioxidants: Absorption, Metabolisms and Molecular Mechanisms
 (1:30 – 2:50 pm)**

Moderator/Organizer: Kazuo Miyashita, Hokkida University (Japan)

111. CIGARETTE SMOKE AFFECTS LUNG VITAMIN E UPTAKE
Giuseppe Valacchi, Yun Sook Lim, Wallace Yokoyama, Carroll E. Cross, Tzipora Goldkorn and Paul A. Davis, University of Siena, Siena (Italy)
112. ROLE OF CAROTENOIDS AS MODIFIERS OF INTRACELLULAR SIGNALING PATHWAYS
Kazuo Miyashita, Hokkida University (Japan)
113. BIOACTIVITY, ABSORPTION AND MECHANISM OF ACTION OF ANTHOCYANINS: UPDATE 2009
Giuseppe Mazza, Agriculture and Agri-Food Canada, Summerland, BC (Canada)
114. LICORICE FLAVONOIDS
Shinichi Honda, Frontier Biochemical and Medical Research Labs, Kaneka Corporation (Japan)

**Session 23: Processing of and Processing Effects on Bioactives and Nutraceuticals
(1:30 – 2:50 pm)**

Moderators: Jose Martinez, Thar Technologies Inc. (USA) and Ming Fu Wang, The University of Hong Kong (Hong Kong)

115. SOLVENT-FREE EXTRACTION OF NUTRACEUTICALS AND BIOACTIVE COMPOUNDS
Jose L. Martinez, Thar Process, Inc., Pittsburgh, PA (USA)
116. DEVELOPMENT OF STABILIZATION TECHNOLOGY FOR BIOACTIVES BY “GREEN PROCESSING” AND NANO (MICRO) TECHNOLOGY
John Shi, Sophia Xue and Yukio Kakuda, Agriculture and Agri-Food Canada & University of Guelph (Canada)
117. EFFECT OF PROCESSING ON THE STRUCTURE AND FUNCTIONAL PROPERTIES OF MILK PHOSPHOLIPIDS
Rafael Jiménez-Flores, Guillaume Brisson, Sophie Gallier and Andrea Laubscher, California Polytechnic State University, San Luis Obispo, CA (USA)
118. STABILITY AND CHEMICAL CHANGES OF DIETARY PHENOLICS AS AFFECTED BY THERMAL PROCESSING
Mingfu Wang, Xiaofang Peng and Ka-Wing Cheng, The University of Hong Kong (Hong Kong)

Session 24: Functional Food Ingredients and Health (1:30 – 2:50 pm)

Moderators: Mohammed H. Moghadasian, University of Manitoba (Canada) and Marian Naczki, St. Francis Xavier University (Canada)

119. USE OF MILK FAT GLOBULE MEMBRANES AS FUNCTIONAL FOOD INGREDIENTS
Thien Trung Le, John Van Camp, Roeland Rombaut, Natacha Thienpont and Koen Dewettinck, Ghent University (Belgium)
120. CARDIOVASCULAR BENEFITS OF PLANT STEROLS
Mohammed H. Moghadasian, University of Manitoba (Canada)
121. NUTRACEUTICALS AND FUNCTIONAL FOOD INGREDIENTS FROM CO-PRODUCTS AND BY-PRODUCTS OF OIL PRODUCTION AND REFINING
Vera Van Hoed, Roland Verhé, Ghent University (Belgium)
122. WILD BLUEBERRY LEAVES AND FRUITS AS POTENTIAL SOURCE OF FOOD ANTIOXIDANTS
Marian Naczki, Ryszard Amarowicz, Ryszard Zadernowski, Ron Pegg and Fereidoon Shahidi, St. Francis Xavier University (Canada)

Nutrition Break: 3:10 – 3:30 pm

**Session 25: Novel Supplements in Weight Loss and Metabolic Syndrome
(3:30 – 4:50 pm)**

*Moderators/Organizers: **Debasis Bagchi**, University of Houston, College of Pharmacy & InterHealth (USA) and **Harry G. Preuss**, Georgetown University Medical Center (USA)*

123. THE “MULTIPLE TARGET HYPOTHESIS” IN WEIGHT MANAGEMENT
Harry G. Preuss, Georgetown University Medical Center, Washington, DC (USA)
124. THE WEIGHT LOSS EFFECTS OF XANTHIGEN™ IN OBESE PREMENOPAUSAL WOMEN WITH NON-ALCOHOLIC FATTY LIVER DISEASE AND NORMAL LIVER FAT
José M. Zubeldia, Poligono Industrial Las Majore (Spain)
125. SAFETY AND EFFICACY OF SUPER CITRIMAX (HCA-SX), A NOVEL WEIGHT LOSS SUPPLEMENT DERIVED FROM *GARCINIA CAMBOGIA*
Sidney J. Stohs, Creighton University Medical Center, Omaha, NE (USA)
126. CHROMIUM(III) DINICOCYSTEINATE: A NOVEL SUPPLEMENT IN METABOLIC SYNDROME
Debasis Bagchi¹ and Sreejayan Nair², ¹University of Houston College of Pharmacy, Houston, TX; ²University of Wyoming School of Pharmacy, Laramie, WY (USA)
127. MOLECULAR MECHANISM OF WEIGHT LOSS BY NOVEL SUPPLEMENTS
Debasis Bagchi, University of Houston College of Pharmacy & InterHealth Research Center (USA)

**Session 26: Phytochemicals and Dietary Components in Heart Health and Beyond
(3:30 – 4:50 pm)**

*Moderators: **Alyson E. Mitchell**, UC Davis (USA) and **Sarwar Gilani**, Health Canada (Canada)*

128. NUTRIENT-DENSE FOODS: FARMING SYSTEMS AND PHYTOCHEMICALS
Alyson E. Mitchell, UC Davis, Davis, CA (USA)
129. IMPACT OF GENETICALLY MODIFIED FOODS AND THEIR BIOACTIVE COMPONENTS IN IMPROVING HUMAN HEALTH
G. Sarwar Gilani and Chaowu Xiao, Health Canada, Ottawa (Canada)
130. FLAVONOL-RICH DIETS AND SELECT CARDIOVASCULAR PARAMETERS IN A GOLDEN SYRIAN HAMSTER MODEL
Heidrun Gross, Swati Kalgaonkar, Carl L. Keen and Wallace Yokoyama
UC Davis, Davis, CA (USA)
131. EVIDENCE FOR THE CARDIOVASCULAR BENEFITS OF *MONASCUS PILOSUS* FERMENTED PRODUCTS
Chia-Feng Kuo, Chien-Ru Li, Tzu-Jung Hu
Shih Chien University (Taiwan)

132. SORGHUM (*SORGHUM BICOLOR* L. MOENCH) DIET IMPROVES LYMPHOCYTE PROLIFERATION AND ANTIOXIDANT CAPACITY OF SPRAGUE DAWLEY RATS
K.D. Puspawati, E. Prangdimurti and **F. Rungkat-Zakaria**
Bogor Agricultural University (Indonesia)