

ISNFF Conference
November 14-17, 2008 – Taichung, Taiwan

November 14, 2008

Registration (4:00-7:00 pm)

November 15, 2008

Opening Ceremony (8:15-9:00 am)

Plenary I (9:00-10:30 am)

Chairs: Fereidoon Shahidi and Chin-Kun Wang

- O1. RECENT ADVANCES IN FUNCTIONAL FOOD RESEARCH IN TAIWAN
Lucy Sun Hwang, National Taiwan University (Taiwan)
- O2. EMERGING PERSPECTIVES IN RESEARCH AND DEVELOPMENT OF FUNCTIONAL FOODS IN JAPAN
Makoto Shimizu, The University of Tokyo (Japan)
- O3. SCIENTIFIC AND REGULATORY CHALLENGES IN RESEARCH ON DIETARY SUPPLEMENTS, NUTRACEUTICALS AND FUNCTIONAL FOODS
Joseph Betz, Office of Dietary Supplements, NIH (USA)
Fereidoon Shahidi, Memorial University (Canada)

Nutrition Break 10:30 – 11:00 am

Session 1: Cancer Risk Reduction by Nutraceuticals and Herbal Products
(11:00 am-12:20 pm)

Chairs: Hyong Joo Lee and Rui Hai Liu

- O4. PHYTOCHEMICALS FOR CANCER PREVENTION: MECHANISMS OF ACTION
Rui Hai Liu – Cornell University (USA)
- O5. ANTICARCINOGENIC ACTIVITY OF ARTEPILLIN C IN BRAZILIAN PROPOLIS FOLLOWING TO ITS BIOAVAILABILITY
Kazuku Kanazawa – Kobe University (Japan)
- O6. CANCER CHEMOPREVENTIVE PHYTOCHEMICALS DERIVED FROM MEDICINAL HERBS AND SPICES
Young-Joon Surh – Seoul National University (Korea)

- O7. MEK AND FYN ARE DIRECT MOLECULAR TARGETS FOR CHEMOPREVENTION WITH MYRICETIN AND QUERCETIN
Hyong Joo Lee – Seoul National University (Korea)

Session 2: Nutraceutical and Functional Foods in Human Health: From Bioprospecting to Healthful Products (11:00 am – 12:20 pm)

Chairs: Gow-Chin Yen and and Lucy Yu

- O8. BOREAL BIOPROSPECTING: APPLICATION IN HUMAN HEALTH
Mamdouh M. Abou-Zaid, John Thor Arnason, Jordana E. Fera, Domenic A. Lombardo, Melanie Coppens
Great Lakes Forestry Centre (Canada)
- O9. *GANODERMA LUCIDUM* TRITERPENOIDS AND THEIR BIOACTIVITY
Gow-Chin Yen, Chia-Jui Weng
National Chung Hsing University (Taiwan)
- O10. HEALTHFUL *TRANS*-FREE MARGARINES PREPARED WITH ENZYMATICALLY-SYNTHESIZED STRUCTURED LIPIDS
Casimir C. Akoh, Byung Hee Kim, Stephen E. Lumor
The University of Georgia (USA)
- O11. PSYLLIUM DERIVATIVES AND THEIR HEALTH BENEFICIAL PROPERTIES
Liangli (Lucy) Yu – University of Maryland (USA)

Lunch Break/Poster Presentation 12:20 – 2:00 pm
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Session 3: Cardiovascular Disease Risk Reduction: Cholesterol-Lowering and Other Nutraceuticals (2:00–3:40 pm)

Chairs: Jerzy Zawistowski and Zhen-Yu Chen

- O12. PHYTOSTEROLS IN HEART HEALTH
Jerzy Zawistowski – University of British Columbia (Canada)
- O13. CONSUMPTION OF WOOD STEROLS BUT NOT POLICOSANOLS ALTERS LIPID PROFILES AND ANTIOXIDANT STATUS IN NORMAL AND HYPERCHOLESTEROLEMIC RATS
David D. Kitts, Aneta Kopec, Jerzy Zawistowski
University of British Columbia (Canada)
- O14. CHOLESTEROL-LOWERING NUTRACEUTICALS AND FUNCTIONAL FOODS
Zhen-Yu Chen – The Chinese University of Hong Kong (Hong Kong, China)

O15. ANTIOXIDATION AND LIVER PROTECTION OF FERMENTED NATTO LIQUID BY CLINICAL TRIAL

Chin Kun Wang – Chung Shan Medical University (Taiwan)

O16. CHEMICAL AND CYTOACTIVE CLASSIFICATION OF SOYA SAPONINS FROM SOY

David G. Popovich, Wei Zhang

National University of Singapore – (Singapore)

Session 4: Nutraceuticals and Functional Fruits/Beverages (2:00-3:40 pm)

Chairs: Giuseppe Mazza and Ming-Chang Wu

O17. ANTHOCYANINS AND POLYPHENOLS AND THEIR HEALTH BENEFITS

Ronald E. Wrolstad – Oregon State University (USA)

O18. ANTHOCYANINS AND HEART HEALTH: THE SCIENTIFIC EVIDENCE

Giuseppe (Joe) Mazza – Agriculture and Agri-Food Canada (Canada)

O19. BLUEBERRY SKIN ETHANOL EXTRACT ACTIVATES PPARA IN HAMSTER LIVER

Agnes M. Rimando, Wallace Yokoyama, Cassia Mizuno, Glenn Bartley, Shabana I. Khan

USDA (USA)

O20. ANTIOXIDANT ACTIVITY AND PROTEIN INTERACTION POTENTIALS OF GOJI BERRY PHENOLICS

Marian Naczk, Kristine Johansen, Fereidoon Shahidi, Gerrard Marangoni, Ryszard Zadernowski

St. Francis Xavier University (Canada)

O21. NEUROPROTECTIVE EFFECTS OF RESVERATROL DERIVATIVES ON PARKINSON'S DISEASE

Mingfu Wang, Jianfei Chao, Ka-Wing Cheng, Raymond Chuen-Chung Chang

The University of Hong Kong (Hong Kong, China)

Nutrition Break 3:40-4:00 pm

Session 5: Regulations, Research, Health Claims and Methodologies (4:00–5:40 pm)

Chairs: Alister Muir and Heizo Tanaka

O22. INTERNATIONAL REGULATION FOR FUNCTIONAL FOODS AND NUTRACEUTICALS (USA AND EUROPE)

Jerzy Zawistowski – University of British Columbia (Canada)

- O23. NUTRACEUTICALS, FUNCTIONAL FOODS AND NUTRIGENOMIC RESEARCH AND DEVELOPMENT IN CANADA
Rickey Y. Yada – AFMNet (Canada)
- O24. CURRENT SYSTEM FOR REGULATION OF HEALTH FOODS OR DIETARY SUPPLEMENTS IN JAPAN - FOOD WITH NUTRIENT FUNCTION CLAIM, AND FOOD FOR SPECIFIED HEALTH USE
Heizo Tanaka – Koshien University (Japan)
- O25. THE ROLE OF ANALYTICAL CHEMISTRY IN REDUCING AMBIGUITY AND UNCERTAINTY IN THE SCIENCE SUPPORTING HEALTH CLAIMS
Alister D. Muir – Agriculture & Agri-Food Canada (Canada)
- O26. DETECTION OF ISOFLAVONES AND DEGRADATION PRODUCTS IN DIFFERENT PLANTS, FOODS AND HUMAN BIOLOGICAL FLUID SAMPLES
**Rong Tsao, Suqin Shao, Alison M. Duncan, Massimo Marcone, Istvan Rajcan
Agriculture and Agri-Food (Canada)**

**Session 6: Marine and Other Nutraceuticals and their Delivery and Health Effects
(4:00-6:00 pm)**

Chairs: Colin Barrow and Georges Halpern

- O27. OMEGA-3 FATTY ACIDS IN HEALTHY FOODS AND THEIR BENEFITS FOR BRAIN HEALTH
Colin J. Barrow – Ocean Nutrition Canada Ltd. (Canada)
- O28. DEVELOPMENT OF MARINE NUTRACEUTICALS FROM SEAFOOD PROCESSING BY-PRODUCTS USING MEMBRANE BIOREACTOR
Se-Kwon Kim – Pukyong National University (South Korea)
- O29. MICROENCAPSULATION TECHNOLOGY WITH POTENTIAL FOR DELIVERY OF A COCKTAIL OF BIOACTIVES TO THE GI TRACT
**Luz Sanguansri, Mary Ann Augustin
CSIRO Preventive Health National Research Flagship (Australia)**
- O30. APPLICATIONS OF DOCOSAHEXAENOIC ACID (DHA) IN FOODS AND BEVERAGES: OUR EXPERIENCES
**Jimbin Mai, Wei Wang-Nolan, Bruce Artman
Martek Biosciences Corporation (USA)**
- O31. APPLICATION AND IMPLICATION OF NANO-ENCAPSULATION TECHNOLOGY AND NUTRACEUTICALS DEVELOPMENT
**Li-Cyuan Wu, Jeng-Sheng Chang, Shie-Bin Chang, Ke Liang B. Chang, Zwe-ling Kong
National Taiwan Ocean University (Taiwan)**
- O32. NOVEL ANTI-INFLAMMATORY MECHANISMS OF LYPRINOL®
Georges M. Halpern – PolyU (Hong Kong, China)

Opening Mixer 7:00 – 9:00 pm

November 16, 2008

Plenary II

Chairs: Lucy Hwang and Kyung-Whan Chang

- O33. FOUND IN TRANSLATION: RELEVANT NUTRACEUTICAL SCIENCE AS A LINK TO CONSUMER CONFIDENCE
Anthony Almada, IMAGINutrition, Inc. (USA)
- O34. POLYPHENOLS AND HEALTH - TOWARDS NUTRITIONAL RECOMMENDATIONS
Augustin Scalbert, INRA (France)
- O35. COMPENDIAL STANDARDS, MONOGRAPH SPECIFICATIONS AND THEIR ROLE IN THE ASSURANCE OF SAFETY AS WELL AS QUALITY OF NUTRACEUTICALS AND FUNCTIONAL FOOD INGREDIENTS
Jim Griffiths – US Pharmacopeia (USA)
- O36. COLLOIDAL SYSTEMS FOR DELIVERY OF BIOACTIVE LIPIDS INTO FUNCTIONAL FOODS
**Eric A. Decker, D. Julian McClements
University of Massachusetts (USA)**

Nutrition Break 10:30-11:00 am

Session 7: Antioxidants and Health (11:00 am-12:20 pm)

Chairs: Young-Joon Surh and Hajime Fujii

- O37. CELLULAR ANTIOXIDANT ACTIVITY ASSAY FOR ASSESSING ANTIOXIDANT FUNCTION
Rui Hai Liu – Cornell University (USA)
- O38. AMELIORATION OF ABDOMINAL OBESITY BY POLYPHENOLICS (OLIGONOL) FROM LYCHEE
**Jun Nishihira, M. Sato, H. Sato, K. Kitadate, K. Wakame, H. Fujii
Hokkaido Information University (Japan)**
- O39. DIETARY QUERCETIN GLYCOSIDES: A REVIEW OF CURRENT UNDERSTANDING OF METABOLISM AND ANTIOXIDANT ACTION
H.P. Vasantha Rupasinghe – Nova Scotia Agricultural College (Canada)
- O40. DEVELOPMENT OF ASTRAGALIN USING SELECTIVE DEGLYCOSYLATION TECHNOLOGY FROM GREEN TEA SEED AND STUDY ON ITS BIOLOGICAL ACTIVITIES
**Hye Yoon Park, Jun Seong Park, Dong-Hyun Kim, Duck Hee Kim, Han Kon Kim
Skin Research Institute (South Korea)**

Session 8: Nutraceuticals and Natural Health Products: Metabolic Syndrome, Glycemic Control and Other Diseases (11:00 am-12:20 pm)

Chairs: Najla Guthrie and Han-Hsin Chang

- O41. EFFECT OF DIABETINOL™ ON GLYCEMIC CONTROL IN SUBJECTS WITH IMPAIRED FASTING GLUCOSE: A DOUBLE-BLIND PLACEBO-CONTROLLED PILOT CLINICAL STUDY
William Judy, Willis Stogsdill, Daniel Judy, Jan Judy, Malkanthi Evans, **Najla Guthrie KGK Synergize, Inc. (Canada)**
- O42. DIETARY FRUCTOSE-INDUCED OXIDATIVE STRESS AND ALLEVIATION BY SOLANUM MURICATUM INTAKE IN A MOUSE MODEL
Han-Hsin Chang, Cheng-Chin Hsu, Shiau-Ting Hong, Ya-Shiuan Lin, Chu-Chyn Ou, Yi-Jen Li
Chung Shan Medical University (Taiwan)
- O43. SOLUBLE CELLULOSE DIETARY FIBER PREVENTS OBESITY RELATED METABOLIC DISEASES IN HAMSTERS
W. Yokoyama, W.H. Anderson, S.A. Young, Y-J. Hong, G. Bartley
USDA (USA)
- O44. EFFECTS OF ORAL ADMINISTRATION OF UNDENATURED TYPE II COLLAGEN (UC-II) IN OSTEOARTHRITIS: A RANDOMIZED, DOUBLE-BLIND CLINICAL TRIAL
Manashi Bagchi – InterHealth Nutraceuticals Inc. (USA)

Lunch Break /Poster Presentations (12:20-2:00 pm)

Session 9: Nuts in Health and Wellness (2:00-3:20 pm)

Chairs: Cesarettin Alasalvar and Lee-Yan Sheen

- O45. PHYTONUTRIENTS OF HAZELNUT AND HAZELNUT OIL IN HEALTH
Cesarettin Alasalvar – TÜBİTAK Marmara Research Center (Turkey)
- O46. PECANS (*CARYA ILLINOINENSIS* (WANGENH.) K. KOCH): AN UNTAPPED SOURCE OF BIOACTIVES FOR FUNCTIONAL FOOD APPLICATIONS
Ronald B. Pegg, Ryszard Amarowicz, Ronald R. Eitenmiller
The University of Georgia (USA)
- O47. BIOACTIVITIES ASSESSMENT OF PEANUT STILBENOIDES
Robin Y.-Y. Chiou – National Chiayi University (Taiwan)
- O48. ANTIDIABETIC AND ANTIOXIDANT ACTIVITY OF ALMONDS
C-Y. Oliver Chen, Jen-Fang Liu, Xudong Jia
Jean Mayer USDA Human Nutrition Research Center on Aging (USA)

Session 10: Nutrigenomics and Nutritional Genomics in Human Health (2:00-3:40 pm)

Chairs: Debasis Bagchi and Sue-Joan Chang

- O49. NUTRIGENOMIC PERSPECTIVES ON CHEMOPREVENTIVE AND CYTOPROTECTIVE EFFECTS OF PHYTONUTRIENTS
Young-Joon Surh – Seoul National University (South Korea)
- O50. PHYSIOLOGICAL GENOMIC APPROACH TO ASSESS THE ANTI-OBESITY POTENTIAL OF A NOVEL CALCIUM/ POTASSIUM SALT OF HYDROXYCITRIC ACID (HCA-SX)
Debasis Bagchi – Houston College of Pharmacy (USA)
- O51. DNA MICROARRAYS REVEAL DIFFERENT GENE EXPRESSIONS IN ADIPOSE TISSUE BETWEEN OBESE AND NON-OBESE MEN INDUCED BY OVERFEEDING
Guang Sun, J. Shea, C. French, J. Bishop, G. Martin, B. Roebbothan, D. Pace, F. Fitzpatrick
Memorial University of Newfoundland (Canada)
- O52. DIETARY SUPPLEMENTATION FOR GENOMIC STABILITY: RESULTS FROM FOUR CONTROLLED CLINICAL TRIALS
Marc Lemay, Yumei Lin, Shyam Ramakrishnan
Nutriline Health Institute (USA)
- O53. PROTEOMIC ANALYSIS FOR THE FUNCTIONALITY OF TOONA SINENSIS BY 2D-GEL ELECTROPHORESIS
Sue-Joan Chang, Ying-Hsin Chen, Wen-Jen Yu, Chen-Chin Chang
National Cheng Kung University (Taiwan)

Nutrition Break 3:40-4:00 pm

Session 11: Probiotics, Fermented and Asian Functional Foods (4:00-6:00 pm)

Chairs: Kun-Young Park and Frank Sherkat

- O54. KOREAN FERMENTED FOODS: KIMCHI AND SOYBEAN FOODS AND THEIR ANTICANCER AND ANTI-OBESITY EFFECTS
Kun-Young Park – Pusan National University (Korea)
- O55. FERMENTED FUNCTIONAL BEVERAGES: A SYNERGY OF PREBIOTICS, VIT. C, POLYPHENOLS AND PROBIOTICS
Frank Sherkat – RMIT University (Australia)
- O56. RECENT PROGRESS ON RESEARCH AND PRODUCT DEVELOPMENT OF INDONESIAN TRADITIONAL FUNCTIONAL FOODS
Hanny Wijaya – Bogor Agricultural University (IBP) (Indonesia)

- O57. APPLICATION OF RED MOLD RICE IN PREVENTIVE MEDICINE
Tzu-Ming Pan – National Taiwan University (Taiwan)
- O58. PROBIOTICS ACTIVITY AND SURVIVAL IN SYNBIOTIC FOODS CONTAINING PREBIOTICS FROM JERUSALEM ARTICHOKE
Frank Sherkat – RMIT University (Australia)
- O59. TEMPEH ON AGING EXPRESSION
**Yin-Ching Chan, Pei-Tung Liang, Ming-Fu Wang
Providence University (Taiwan)**

Session 12: Bioactive Peptides and Proteins in Disease Risk Reduction (4:00-5:40 pm)

Chairs: Eunice Li-Chan and Tzu-Ming Pan

- O60. OPPORTUNITIES AND CHALLENGES FOR DEVELOPING BIOACTIVE PEPTIDES AS NUTRACEUTICALS AND FUNCTIONAL FOOD INGREDIENTS
Eunice C.Y. Li-Chan – University of British Columbia (Canada)
- O61. CALMODULIN-DEPENDENT METABOLIC ENZYMES AS POTENTIAL TARGETS FOR FOOD PROTEIN-DERIVED BIOACTIVE PEPTIDES
Rotimi E. Aluko – University of Manitoba (Canada)
- O62. SMALL PEPTIDES BASED INTERVENTIONS IN CHRONIC GUT INFLAMMATION AND ITS CELLULAR MECHANISM
Yoshinori Mine – University of Guelph (Canada)
- O63. MODERATION OF HEPATITIS BY PYROGLUTAMYL PEPTIDE IN WHEAT GLUTEN HYDROLYSATE
**K. Sato, M. Nagata, H. Sanada, Y. Egashira, S. Ono, Y. Kido, Y. Suzuki, E. Y. Park, Y. Nakamura
Kyoto Prefectural University (Japan)**
- O64. GROWTH ENHANCEMENT OF SKIN FIBROBLAST BY FOOD DERIVED COLLAGEN PEPTIDE IN HUMAN BLOOD
**Yasutaka Shigemura, Koji Iwai, Fumiki Morimatsu, Toshio Mori, Toshio Taira, Eun Young Park, Yasusi Nakamura, Kenji Sato
Osaka Junior College (Japan)**

Annual General Meeting (6:00-6:30 pm)

Editorial Board Meeting (J Functional Foods) (6:30-7:00 pm)

GALA DINNER (7:30-11:30 PM)

November 17, 2008

Plenary III - (8:30-10:30 am)

Chairs: Chi-Tang Ho and Ronald B. Pegg

- O65. OPPORTUNITIES AND CHALLENGES OF NANOTECHNOLOGY APPLICATIONS IN NUTRACEUTICALS AND FUNCTIONAL FOODS
Hongda Chen – USDA (USA)
- O66. REGULATORY FRAMEWORK FOR NATURAL HEALTH PRODUCTS IN CANADA
Michael Smith – Health Canada (Canada)
- O67. NOVEL ROLE OF FLAVONOIDS AS FUNCTIONAL FOOD INGREDIENTS IN HEALTH PROMOTION: A NEW MECHANISM OF ACTION
**Chi-Tang Ho, Mingfu Wang, Shengmin Sang, Lucy Sun Hwang
Rutgers University (USA)**
- O68. BENCH TO BEDSIDE TO BETTER LIVING: THE EFFECTS OF FLAXSEED ON CARDIOVASCULAR HEALTH
**Grant N. Pierce, C.M.C. Dupasquier, B.P. Ander, M.N. Richard, J.A. Austria, E. Dibrov
University of Manitoba (Canada)**

Nutrition Break 10:30-11:00 am

Session 13: Carotenoids: Functions and Health Promotion (11:00-12:20 pm)

Chairs: Kazuo Miyashita and Yoshinori Mine

- O69. NEW ASPECT OF CAROTENOID FUNCTIONS
T. Tsukui, T. Sashima, M. Hosokawa Masashi, **K. Miyashita
Hokkaido University (Japan)**
- O70. PREVENTIVE EFFECT OF MARINE CAROTENOIDS AGAINST METABOLIC SYNDROME
**T. Okada, T. Sashima, M. Hosokawa, K. Miyashita
Hokkaido University (Japan)**
- O71. THE RELEASE MECHANISM OF β -CAROTENE IN OIL-IN-WATER EMULSIONS STUDIED USING AN *IN VITRO* DIGESTION MODEL: EFFECT OF OIL/WATER INTERFACE
**Amir Malaki Nik, Milena Corredig, Amanda J. Wright
University of Guelph (Canada)**

- O72. ANTIOXIDANT, ANTI-MUTAGENIC AND ANTI-CLASTOGENIC ACTIVITIES OF LUTEIN AND ITS EFFECT ON THE PROLIFERATION AND DIFFERENTIATION OF HUMAN ESOPHAGEAL CANCER CELLS
Rong Tsao, Mincheng Wang, Chanli Hu
Agriculture and Agri-Food Canada (Canada)

Session 14: Nutraceutical Oils, their Bioactives and Health Effects (11:00 am-12:20 pm)

Chairs: Roland Verhé and Ching-Jang Huang

- O73. NUTRACEUTICAL MINOR COMPONENTS IN SPECIALTY VEGETABLE AND FRUIT OILS
R. Verhé, V. Van Hoed, M. Andjelkovic, C. Echim
Ghent University (Belgium)
- O74. ENZYMATIC PREPARATION OF NUTRACEUTICAL PHOSPHOLIPIDS
Y. Yamamoto, **M. Hosokawa**, K. Miyashita
Hokkaido University (Japan)
- O75. BIOACTIVE PEPTIDES IN FLAX OIL AND SEED
Martin Reaney, Yunhua Jia, Jianheng Shen, Gui Bo
University of Saskatchewan (Canada)
- O76. PHYSIOLOGICAL EFFECTS AND APPLICATIONS OF HYDROXY FATTY ACIDS
Thomas A. McKeon - USDA-ARS WRRC (USA)

Lunch Break/Poster Presentations (12:20-2:00 pm)

Session 15: How to Publish Your Research? (2:00-3:20 pm)

Chairs: Fereidoon Shahidi and Zhen-Yu Chen

- O77. INTRODUCTION
Fereidoon Shahidi (**Canada**)
- O78. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY
Zhen-Yu Chen (**Hong Kong, China**)
- O79. FOOD CHEMISTRY
Fereidoon Shahidi, Lyndon Driscoll (**Canada and UK**)
- O80. JOURNAL OF FUNCTIONAL FOODS
Debasis Bagchi, Fereidoon Shahidi (**USA and Canada**)
- O81. JOURNAL OF FOOD SCIENCE
Chi-Tang Ho (**USA**)

O82. MOLECULAR NUTRITION AND FOOD RESEARCH
Chi-Tang Ho (USA)

O83. JOURNAL OF THE AMERICAN OIL CHEMISTS' SOCIETY
Casimir Akoh (USA)

O84. JOURNAL OF FOOD LIPIDS
Fereidoon Shahidi (Canada)

Awards and Closing Ceremonies (3:20-4:00 pm)