## Sunday November 25th 2007

### **ROOM A**

16:00 Opening Lectures - Invitation to Polyphenol Research -

16:00-16:30 Chair: Junji Terao, Japan

**OL1** Polyphenols as antioxidants: Chemistry versus physiology

Cesar G. Fraga, University of California, Davis, USA

16:30-17:00 Chair: Hiroshi Chuman, Japan

**OL2** The absorption and metabolism of polyphenols

Jennifer L. Donovan, Medical University of South Carolina,

USA

\*Opening Lectures are sponsored by The University of Tokushima Center of Excellence Program.



17:10 Opening Remarks

17:30 Keynote Lectures

17:30-18:00 Chair: Hajime Ohigashi, Japan

**KL1** Dietary flavanols and vascular responses

Helmut Sies, Heinrich-Heine University of Dusseldorf, Germany

18:00-18:30 Chair: Augustin Scalbert, France

**KL2** Recent development of polyphenol research by collaboration

between industrial and academic sectors for application in human

health

Toshihiko Osawa, Nagoya University, Japan

# Monday November 26th 2007

### **ROOM A**

08:30 **Symposium 1: Food Chemistry** Chairs: Andrew L. Waterhouse, USA Michikatsu Sato, Japan 08:30 - 08:55S01-1 Agricultures influence on food composition: a comparison of flavonoids in organic and conventionally grown tomatoes Alyson E. Mitchell, University of California, Davis, USA 08:55 - 09:20S01-2 The polymerization degree and stereochemistry of procyanidins affect the physiological functions of the cells Toshihiko Shoji, Asahi Breweries, Ltd., Japan 09:20 - 09:45S01-3 Effect of food processing on polyphenol bioavailability Francisco A. Tomas-Barberan, CEBAS (CSIC), Spain 09:45 - 10:10S01-4 Understanding and modulating flavonoid biosynthesis in plants Christian Dubos, INRA-AgroParisTech, France 10:10 - 10:25S01-5 Antioxidation reaction mechanism of polyphenols, caffeic acid

#### Tea and Coffee Break

Toshiya Masuda, University of Tokushima, Japan

and related compounds

10:45	Symposium 3: Bioavailability & Metabolism
	Chairs: Herman Adlercreutz, Finland Alan Crozier, UK
10:45 –	,
S03-1	Absorption and metabolism of flavonoids from standard portions of various fruits - impact of processing, dose and subject variation <b>Paul A. Kroon</b> , Institute of Food Research, Norwich, UK
11:10 –	11:35
S03-2	Bioavailability of dietary lignans in humans  José L. Peñalvo, University San Pablo CEU, Spain
11:35 –	12:00
S03-3	Immunochemical characterization of dietary flavonoid metabolites in aorta: Implication in the anti-atherosclerosis effect  Yoshichika Kawai, The University of Tokushima, Japan
12:00 –	12:25
S03-4	Human and animal studies on the bioavailability and metabolism of dietary phenolics
10.05	Alan Crozier, University of Glasgow, UK
12:25 – <b>S03-5</b>	Conversion of procyanidins by human intestinal microbiota  Annett Braune, German Institute of Human Nutrition Potsdam- Rehbruecke, Germany

### 08:30 Symposium 2: Allergy & Inflammation Chairs: Hisanori Suzuki. Italv Mari Maeda-Yamamoto, Japan 08:30 - 08:55S02-1 Anti-allergic action of O-methylated catechin in green tea Mari Maeda-Yamamoto, National Institute of Vegetable and Tea Science, Japan 08:55 - 09:20Dietary apple procyanidins inhibit the development of oral S02-2 sensitization and food allergies Hiroshi Akiyama, National Institute of Health Science, Japan 09:20 - 09:45S02-3 Targeting STAT1 by epigallocatechin gallate, myricetin and delphinidin provides efficient protection in ischemia/reperfusioninduced heart injury Hisanori Suzuki, University of Verona, Italy 09:45 - 10:10S02-4 Vascular protection by grape-derived polyphenols Valérie B. Schini-Kerth, Universite Louis Pasteur de Strasbourg, France 10:10 - 10:25S02-5 Modulation of the signaling NF-κB activation pathway by polyphenols in human intestinal Caco-2 cells Beatrice Romier-Crouzet, Universite catholique de Louvain, Belgium Tea and Coffee Break 10:45 **Symposium 4: Cognitive Function** γt

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	Chairs: Jim A. Joseph, USA Hiramitsu Suzuki, Japan
10:45 - 11:10	
S04-1	Green tea consumption and cognitive function: a cross-sectional study <b>Shinichi Kuriyama</b> , Tohoku University, Japan
11:10 - 11:35	
S04-2	Flavonoids as neurotrophic factors
	Pamela A. Maher, The Salk Institute of Biological Studies, USA
11:35 – 12:00	
S04-3	Molecular mechanisms underlying the cognitive effects of polyphenols
	Jeremy P. E. Spencer, University of Reading, UK
12:00 - 12:25	<b>3</b> , 1
S04-4	Proteomic profiling for evaluating the neuroprotective mechanism of green tea polyphenols: prospective for neurodegenerative disease therapy
	Orly Weinreb, Technion-Israel Institute of Technology, Israel
12:25 – 12:40	
S04-5	Curcumin attenuates diabetic encephalopathy in rats: behavioral, biochemical and anti-inflammatory evidences

Anurag Kuhad, Panjab University, India

### 12:40-13:40 Lunch

#### **ROOM A**

13:40 Sponsored Symposium 1: Tea and Health

Chairs: Balz Frei, USA

Francesco Visioli, France

13:40 - 14:05

**SS1-1** Polyphenols in cardiovascular disease: effects on endothelial

function

Joseph A. Vita, Boston University School of Medicine, USA

14:05 - 14:30

**SS1-2** Recent epidemiologic studies on green tea consumption and

cancer risk in Japan

Manami Inoue, National Cancer Center, Japan

14:30 - 14:55

**SS1-3** Chemoprevention of human prostate cancer by oral administration

of green tea catechins

Saverio Bettuzzi, University of Parma, Italy

#### Tea and Coffee Break

15:20 - 15:45

**SS1-4** Effects of white tea, caffeine and EGCG on 2-amino-1-methyl-6-

phenyl-imidazo[4,5-b]pyridine (PhIP)-induced tumorigenesis and

β-catenin expression

Roderick H. Dashwood, Linus Pauling Institute, USA

15:45 - 16:10

**SS1-5** Does tea reduce body weight and alleviate diabetes?

Chung S. Yang, Rutgers, The State University of New Jersey,

USA

16:10 - 16:35

**SS1-6** Paradoxical effects of green tea and antioxidant vitamins in

diabetes: improved oxidant stress but worsened carbonyl stress

Vincent M. Monnier, Case Western Reserve University, USA

16:35 - 16:55

#### **Panel Discussion**

\* This symposium is sponsored by Mitsui Norin Co.,Ltd., Kao Co., Linus Pauling Institute, DSM and Te Infre.







13:40 Symposium 5: Pharmaceuticals

Chairs: Tsutomu Hatano, Japan Takashi Yoshida, Japan

13:40 - 14:05

S05-1 In vitro immunomodulatory effects of polyphenols on macrophages

Herbert Kolodziej, Freie Universitaet Berlin, Germany

14:05 - 14:30

**S05-2** Antioxidant, antimalarial and antimicrobial activities of polyphenols

from Punica granatum L.

Daneel Ferreira, The University of Mississippi, USA

14:30 - 14:55

**S05-3** New aspects of green tea catechins in relation to DNA and RNA

molecules

Takashi Kuzuhara, Tokushima Bunri University, Japan

14:55 - 15:20

**S05-4** Functional evaluation of polyphenols as alternative medicine

Hiroshi Sakagami, Meikai University, Japan

15:20 - 15:35

**S05-5** Nasal administration of guercetin liposomes improves anti-

depression like effect and enhances memory

Wathita Phachonpai, Khon Kaen University, Thailand

Tea and Coffee Break

ROOM B2, D and E

17:00 – 18:00 **Po** 

**Poster Session** 

## Tuesday, November 27th, 2007

### **ROOM A**

08:30	Symposium 6: Metabolic Syndrome
	Chairs: Gary Williamson, UK
08:30 – 08:55	Yoshinobu Kiso, Japan
S06-1	Tea and cinnamon polyphenols improve the metabolic syndrome <b>Richard A. Anderson</b> , Beltsville Human Nutrition Research Center, USA
08:55 – 09:20	
S06-2	The effect of dietary flavonoids on cardiovascular risk <b>Kevin D. Croft</b> , University of Western Australia, Australia
09:20 – 09:45	
S06-3	Prevention of metabolic syndrome by oolong tea polymerized polyphenols and sesamin  Yoshinobu Kiso, SUNTORY Ltd., Japan
09:45 – 10:10	
S06-4	Regulation of adipocyte function by polyphenols-possibility of preventing the metabolic syndrome- <b>Takanori Tsuda</b> , Chubu University, Japan
10:10 - 10:25	
S06-5	Daily consumption of an aqueous green tea extract does not affect vascular reactivity or risk factors for coronary heart disease in healthy men
	Jan Frank, Christian Albrechts University, Germany
	Tea and Coffee Break
10:45	Symposium 9: Oxidative Stress & Cell Signaling Chairs: Barry Halliwell, Singapore Tsutomu Nakayama, Japan
10:45 – 11:10	• • • • • • • • • • • • • • • • • • • •
S09-1	Beneficial effects of phenolic acids and their role in antiobesity <b>Gow-Chin Yen</b> , National Chung Hsing University, Taiwan
11:10 – 11:35	
S09-2	Polyphenols and genomic instability: From molecules to man <b>Susan J. Duthie</b> , Rowett Research Institute, UK
11:35 – 12:00	

**Yusaku Nakabeppu**, Kyushu University, Japan 12:00 – 12:25

**S09-4** Modulation of transcription factor NF- $\kappa$ B by flavan-3 ols and

nucleic acids and the affect of polyphenols

procyanidins

Patricia I. Oteiza, University of California, Davis, USA

Disruption of defense mechanisms against oxidative damage in

12:25 - 12:40

S09-3

**S09-5** Protective effects of quercetin and its human conjugated

metabolites on cardiovascular disease

Federica Lodi, Institute of Food Research, Norwich, UK

08:30	Symposium 7: (Poly)methoxyflavonoids  Chairs: Chi-Tang Ho, USA
08:30 - 08:5	Kayoko Shimoi, Japan
S07-1	Chemistry and biology of polymethoxyflavones and hydroxylated polymethoxyflavones
	Chi-Tang Ho, Rutgers University, USA
08:55 – 09:2 <b>S07-2</b>	Nobiletin treatment and the prevention of atherosclerosis in a mouse model of the disease  Stewart C. Whitman, University of Ottawa, Canada
09:20 - 09:4	•
S07-3	Versatile effects of citrus polymethoxyflavonoids on inflammatory cells
	Akira Murakami, Kyoto University, Japan
09:45 – 10:1 <b>S07-4</b>	Antiproliferative and antimetastatic potential of methoxyflavonoids derived from Artemisia plants
	Hye-Kyung Na, Seoul National University, Korea
10:10 – 10:2	
S07-5	Flavonoid metabolites mono-O-methylated at the B ring are inhibitors of endothelial NADPH oxidase activity <b>Tankred Schewe</b> , Heinrich Heine University, Germany
	Tea and Coffee Break
10:45	Symposium 8: Nutrigenomics
	Chairs: Roger Corder, UK Ichiro Matsumoto, Japan
10:45 – 11:1	
S08-1	Impact of sesame lignans affecting gene expression profile in rat liver
11:10 – 11:3	<b>Takashi Ide</b> , National Food Research Institute, Japan
S08-2	Procyanidin regulation of the vascular endothelium - From genes to function
	Roger Corder, William Harvey Research Institute, UK
11:35 – 12:0 <b>S08-3</b>	Dietary polyphenols and atherosclerosis - Analysing their mode of action in a mice model by a transcriptomic approach  Dragan Milenkovic, INRA-UMR, France
12:00 – 12:2	, ,
S08-4	Ilex paraguariensis herbal extract-induced changes in the visceral adipose tissue gene expression profile of rats fed high-fat diet
12:25 – 12:4	Taesun Park, Yonsei University, Korea

# 12:40-13:40 Lunch

# **ROOM A**

13:40	Symposium 10: Epidemiology & Intervention Study
	Chairs: Adrian Franke, USA
	Peter C. Hollman, The Netherlands
13:40 – 14:05	
S10-1	Polyphenols and health: Evidence from epidemiology and intervention studies
	Peter C. Hollman, RIKILT, The Netherlands
14:05- 14:30	,
S10-2	Prospective studies of green tea and cancer and cardiovascular disease in Japan
	Yoshitaka Tsubono, Tohoku University, Japan
14:30 -14:55	3,p
S10-3	Soy isoflavones: Bioavailability and breast cancer preventive effects
	Adrian A. Franke, Cancer Research Center of Hawaii, USA
14:55 – 15:20	, , , , , , , , , , , , , , , , , , ,
S10-4	Dietary and endogenous redox network: The antioxidant "weight" of flavonoids rich foods
	Mauro Serafini, INRAN, Italy
15:20 - 15:35	· · · · · · · · · · · · · · · · · · ·
S10-5	Intake of flavonoids and risk of cancer in Finnish men: The Kuopio
	Ischaemic Heart Disease Risk Factor Study
	Jaakko Mursu, University of Kuopio, Finland

Tea and Coffee Break

13:40 Sponsored Symposium 2: Anthocyanin

Chairs: Andrew L. Waterhouse, USA

De-Xing Hou, Japan

13:40 - 14:05

**SS2-1** Bilberry anthocyanins and biological activities

De-Xing Hou, Kagoshima University, Japan

14:05 - 14:30

**SS2-2** Biological behaviors of bilberry anthocyanins

Takashi Ichiyanagi, Niigata University of Pharmacy and Applied

Life Sciences, Japan

14:30 - 14:55

Stress signaling in and the modulation of age-related behavioral

decline via dietary fruit and walnut supplementation

Jim A Joseph, USDA HNRCA at Tufts University, USA

14:55 - 15:20

SS2-4 New perspectives and medical application of the *Vaccinium* 

myrtillus extract

Ezio Bombardelli, Indena SpA, Italy

<sup>\*</sup> This symposium is sponsored by Natural Way Co., Ltd.



Tea and Coffee Break

Room B2, D and E

16:00 – 17:00 **Poster Session** 

19:00 Banquet (**Grand Prince Hotel Kyoto**)

### Wednesday, November 28th, 2007

### **MAIN HALL**

09:30 **Joint Keynote Lectures** 09:30 - 10:10Chair: Toshihiko Osawa, Japan JKL1 Polyphenols and inflammatory effects Andrew L. Waterhouse, University of California, Davis, USA 10:10 - 10:50Chair: Shaw Watanabe, Japan JKL2 Genomics for food functionality and palatability Keiko Abe, The University of Tokyo, Japan 10:50 - 11:30Chair: Hajime Ohigashi, Japan JKL3 Searching for molecular targets of chemopreventive and chemoprotective phytochemicals: Signal transduction network as a road map Young-Joon Surh, Seoul National University, Korea 11:40 **Invited Lecture I** (Sponsored by ICoFF) Chair: Toshikazu Yoshikawa, Japan 11:40 - 12:40 IL1 Molecular mechanism of  $\alpha$ -tocopherol action Angelo Azzi, The Jean Mayer USDA Human Nutrition Center, USA \* Invited Lecture 1 is co-organized with the 19th Meeting of Japanese Vitamin E Research Association. Lunchboxes will be served. 12:45 Joint Symposium 1: Cancer Prevention I Chairs: Zigang Dong, USA Hyong Joo Lee, Korea 12:45 - 13:10SJ1-1 Targeting inflammation for prevention and treatment of cancer: Food for thought Bharat B. Aggarwal, The University of Texas, USA 13:10 - 13:35SJ1-2 Molecular action of cancer-preventive effect of cocoa polyphenols Hyong Joo Lee, Seoul National University, Korea 13:35 - 14:00SJ1-3 Green tea polyphenol EGCG signaling through 67kDa laminin receptor Hirofumi Tachibana, Kyushu University, Japan 14:00 - 14:25Molecular targets of polyphenols on cancer prevention SJ1-4 Zigang Dong, University of Minnesota, USA 14:25 - 14:40

cancer prevention

Up-regulation of GADD153 gene with combination of green tea polyphenol and cancer preventive agent is a new mechanism of

Masami Suganuma, Saitama Cancer Center, Japan

**SJ1-5** 

#### **ROOM A**

11:40 Invited Lecture 2 (Sponsored by ICoFF)

Chair: Junji Terao, Japan

11:40 – 12:40

IL2 Phytonutrients as antioxidants: Where are we?

Cesar G. Fraga, University of California, Davis, USA

Lunchboxes will be served.

### 12:45 Joint Symposium 2: Phytoestrogens Chairs: Johanna W. Lampe, USA Mariko Uehara, Japan 12:45 - 13:10SJ2-1 Phytoestrogens: Interindividual variation in their metabolism and impact on biologic response Johanna W.Lampe, Fred Hutchinson Cancer Research Center, **USA** 13:10 - 13:35**SJ2-2** Dietary soy and risk of breast cancer Chisato Nagata, Gifu University, Japan 13:35 - 14:00**SJ2-3** Effects of soybean isoflavones on bone health and its safety in postmenopausal Japanese women Yoshiko Ishimi, National Institute of Health and Nutrition, Japan 14:00 -14:25 **SJ2-4** Lignans and human health Herman Adlercreutz, University of Helsinki, Finland 14:25 - 14:40**SJ2-5** Microbial and dietary factors associated with the equol and 8-prenylnaringenin producer phenotypes Selin Bolca, Ghent University, Belgium

# **MAIN HALL**

15:00	Plenary Lectures
15:00 -15:30 <b>PL1</b>	Chair: Hitoshi Ashida, Japan Are polyphenols good, bad, or indifferent? Barry Halliwell, National University of Singapore, Singapore
15:30-16:00 <b>PL2</b>	Chair: Kazuki Kanazawa, Japan Factors affecting the bioavailability of polyphenols Gary Williamson, University of Leeds, UK
16:00-16:30 <b>PL3</b>	Chair: Mamoru Isemura, Japan Tea and cancer prevention: Mechanisms and human relevance Chung S. Yang, Rutgers, the State University of New Jersey, USA
16:45-17:15 <b>PL4</b>	Chair: Teruo Miyazawa, Japan Evidence for a positive influence of flavanol on vascular health Carl Keen, University of California, Davis, USA
17:15-17:45 <b>PL5</b>	Chair: Cesar Fraga, USA Evaluation of polyphenol safety focused on chromosomal damage and interaction with drugs Keizo Umegaki, National Institute of Health and Nutrition, Japan
17:45-18:15 <b>PL6</b>	Chair: Makoto Shimizu, Japan Unraveling the complex links between dietary polyphenols and health: Think global rather than targeted. Augustin Scalbert, INRA, France

18:15 Closing Remarks

All participants are invited to come and view the posters which will be displayed in Room B2, D and E from Monday November 26th through Tuesday November 27th.

Poster presentations are scheduled for Monday Nov. 26th from 17:00-18:00 and Tuesday Nov. 27th from 16:00-17:00.

Authors are requested to stand by their posters during the presentation time indicated below.

Poster Session	Room numbers	Poster numbers	Presentation time	Abstract page
Food Chemistry	E	P001~073	Nov. 26 17:00-18:00	
Allergy & Inflammation	E	P074~079	Nov. 26 17:00-18:00	
Bioavailability & Metabolism	D	P080~141	Nov. 26 17:00-18:00	
Cognitive Function	D	P142~152	Nov. 26 17:00-18:00	
Pharmaceuticals	B2	P153~167	Nov. 26 17:00-18:00	
Metabolic Syndrome	E	P169~197	Nov. 27 16:00-17:00	
(Poly)methoxyflavonoids	E	P198~204	Nov. 27 16:00-17:00	
Nutrigenomics	B2	P205~217	Nov. 27 16:00-17:00	
Oxidative Stress & Cell Signaling	D	P218~262	Nov. 27 16:00-17:00	
Epidemiology & Intervention Study	D	P263~273	Nov. 27 16:00-17:00	
*Cancer Prevention	E	P274~303	Nov. 27 16:00-17:00	
*Phytoestrogens	Е	P304~310	Nov. 27 16:00-17:00	

Posters numbered P008, P168, P259, P260, P271, and P272 were withdrawn.

<sup>\*</sup>Cancer Prevention and Phytoestrogens are held as joint sessions with ICoFF2007 at Room E. Please see Supplemental Abstracts in the same categories of ICoFF2007 in Page XX.