

# ICoFF / ISNFF

Food Factor Science  
from the Molecular to Human Studies

December 1 (Sun) – 5 (Thu), 2019

Kobe Convention Center,  
Kobe, Japan

## ICoFF 2019

The 7th International Conference on  
Food Factors

## ISNFF 2019

The 12th International Conference and  
Exhibition on Nutraceuticals and  
Functional Foods



# Program



# 世界の金賞を味わいませんか。

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DOUBLE GOLD

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OUTSTANDING

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2018優秀金賞



BTI  
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※1 栄養表示基準による ※2 100mlあたりプリン体0.5mg未満を「プリン体ゼロ」と表示



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from the Molecular to Human Studies**

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The 7th International Conference on  
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## Program

**December 1 (Sun) – 5 (Thu), 2019**  
Kobe Convention Center

# Kobe, Japan

# Contents

<b>Welcome Messages</b> .....	3
<b>Program at a Glance</b> .....	6
<b>Organizing Committee</b> .....	8
<b>Support Organizations and Academic Societies</b> .....	11
<b>Sponsors and Donations</b> .....	12
<b>Conference Information</b> .....	14
<b>Date &amp; Venue, Registration, Name Badge, Cloakrooms, Internet Access,</b> <b>Photocopies and Printing, Message Board, Refreshments, Lunch, Exhibition, Secretariat</b>	
<b>Area Map &amp; Floor Guide</b> .....	16
<b>Social Programs</b> .....	19
<b>Instruction for Oral and Poster Sessions</b> .....	20
<b>Scientific Program</b> .....	23
<b>Oral Presentations</b> .....	23
<b>Poster Presentations</b> .....	83
<b>Luncheon Seminars</b> .....	155
<b>Author Index</b> .....	163

# Welcome to the ICoFF2019/ ISNFF2019 KOBE

## Greetings

It is our great honor to hold the 7th International Conference on Food Factors (ICoFF2019), the 12th International Conference and Exhibition on Nutraceuticals and Functional Foods (ISNFF2019) and the 9th International Conference on Polyphenols and Health (ICPH2019) as FOOD FACTOR WEEK IN KOBE from November 28<sup>th</sup> to December 5<sup>th</sup>, 2019.

These three international conferences have independently provided important novel information about function, characteristics, and analysis of food components to all the celebrated scholars, industrial professionals and students. Here in Kobe, it is our pleasure to hold three celebrated international conferences in the same period at the same venue, Kobe Convention Center. We believe that the series of conferences will offer opportunities to share information, exchange scientific ideas and create network between the participants from all over the world.

Kobe is an attractive city having a unique style with the exotic atmosphere in Japan, which has been affected by the foreign cultures and flourished as the international port since old days. Blessed with natural beauty such as Mt. Rokko and Seto Inland Sea, Kobe is known as the gourmet street (Kobe beef, Nada Japanese sake, wine and sweets), as well as the fashion street with the sophisticated image. Therefore, Kobe is one of the most popular sightseeing cities with many wonderful sightseeing spots including the famous hot spring street in Arima. All the participants may also visit famous historical cities, Kyoto, Nara and Himeji. These cities can be reached in one hour by train. Please visit UNESCO World Heritage sites and enjoy Japanese culture and cuisine during your staying in Kobe.



**Hitoshi Ashida, PhD**

Kobe University

Joint Organization Committee Chair

ICoFF2019/ICPH2019/ISNFF2019

# Welcome to the ICoFF2019/ ISNFF2019 KOBE

## Welcome Address



Welcome to the 7th International Conference on Food Factors (ICoFF2019) !

On behalf of the organizing committee members, I appreciate your participation to ICoFF2019. We are delighted to hold the ICoFF2019 as a joint conference with the 12th International Conference and Exhibition on Nutraceuticals and Functional Foods (ISNFF2019). It is a noteworthy point that this is the first ICoFF-ISNFF joint conference. With respect to the conference theme, we have adopted "Food Factor Science from Molecular to Human Studies" for ICoFF2019/ISNFF2019.

With the mission of promoting research into all aspects of basic and applied Food and Nutritional Science, ICoFF held its first conference in 1995 and has continued to hold the conference every four years. ICoFF is one of the largest international conferences for researchers, scientists, professors and students in the field of food factors and their health-promoting effects. After the first ICoFF, the executive committee at that time established the Japanese Society of Food Factors (JSoFF). Since then, JSoFF has been mainly running the ICoFF. The organizing committee of ICoFF2019 is mainly comprised of members of JSoFF and is exerting their utmost efforts in preparing for the conference. We believe that you will be satisfied with the academic program, social events, and our management.

We really hope your impassioned discussion about scientific presentations. This joint conference will be a good opportunities to exchange scientific ideas and create networks between people from academia, industries and regulatory authorities as well as between young and established scientists and professionals.

A handwritten signature in black ink that reads "Hitoshi Ashida". The signature is written in a cursive, flowing style.

**Hitoshi Ashida, PhD**

Kobe University

President

The 7th International Conference on Food Factors

## Welcome Address

The International Society for Nutraceuticals and Functional Foods (ISNFF) is pleased to have its 12th Annual Conference and Exhibition joint with the 7th International Conference on Food Factors (ICoFF) in Kobe, Japan. On behalf of the local organizing committee ISNFF as well as its international directorate, we would like to express our sincere gratitude to all the celebrated scholars, students, and industry professionals from around the world.

For last decades, our knowledge on tertiary function (health promoting activity) of food has tremendously increased and spread over food science, and nutrition areas. Now food is used not only as a source of nutrients but for health promotion, disease risk reduction, and support for healing from illnesses. For these purposes, multidisciplinary collaboration is necessary. Furthermore, bridging the existing gap between science and regulation needs attention.

The ISNFF was established by Dr. Fereidoon Shahidi and colleagues in 2008 as a not-for-profit society in response to widespread recognition of the health promotion via food. Over the past decade, ISNFF has successfully bridged the gap among science communities, health care professionals, industry and consumers through its annual meetings, short courses, seminars and exhibitions. The annual meetings, the main event of ISNFF, have been held every year around the globe. In this joint conference, we encourage and trust that you would enjoy scientific exchange in wider areas of research and product development and making new and strong networking. We strongly believe that this joint conference facilitates and strengthens science on food function for enhancing quality of human life. We encourage you to actively participate in this joint conference and join our next annual meeting in Nanjing, China, October, 2020.



A handwritten signature in black ink that reads "Kenji Sato".

**Kenji Sato, PhD, ISNFF 2019 Local Conference President**



A handwritten signature in black ink that reads "Kazuo Miyashita".

**Kazuo Miyashita, PhD, ISNFF Chair 2018-2019**



A handwritten signature in black ink that reads "F. Shahidi".

**Fereidoon Shahidi, PhD, ISNFF Principle Founder and Director**

# Program at a Glance

		8:30	9:00	10:00	11:00	12:00	13:00	
Dec. 1 (Sun)	3F Entrance				Registration (7:45~) 30		45	30
	Room B				ICoFF Pre-Symposium Polyphenols: The road from plants to functional foods		Special Lecture	
	Portopia Hall							
Dec. 2 (Mon)	3F Entrance	30			Registration (7:45~) 15		15	
	Room A	Plenary Lectures 1 & 2		Coffee Break	SY 1 Washoku		LS 1 Daicel	
	Room B				SY 2 Nutraceuticals		LS 2 Ezaki Glico	
	Room C				SY 3 Fruits & Vegetables		LS 3 Fuji Oil	
	Room D				SY 4 Absorption, Bioavailability & Metabolism		LS 4 Nitto Pharma.Ind.	
	Room E				SY 5 Functional Lipids		LS 5 PHARMA FOODS	
	Room F				SY 6* Quercetin glycoside and Curcumin		LS 6 Nissin Seifun	
	Exhibition	Exhibition						
	Poster Room				Poster Mounting		Poster Viewing	
Dec. 3 (Tue)	3F Entrance	Registration (7:45~)						
	Room A	Plenary Lectures 3 & 4		Coffee Break	SY 17 Gastrointestinal Health		LS 7 TAIYO KAGAKU	
	Room B				SY 18 Functional Protein & Peptides-1		LS 8 Chonbuk Natl. Univ. Hosp.	
	Room C				SY 19* Garlic Supplement		LS 9 Sun Chlorella	
	Room D				SY 20 Nutritional Regulation of Epigenetics		LS 10 NUTRILITE	
	Room E				SY 21 Natural Plant Pigments		LS 11 Maruha Nichiro	
	Room F				SY 22 Molecular Targets of Food Factors		LS 12 Agilent Technol.	
	Exhibition	Exhibition						
	Poster Room	Poster Viewing						
Dec. 4 (Wed)	3F Entrance	Registration (7:45~)						
	Room A	Plenary Lectures 5 & 6		Coffee Break	SY 35 Lipid Quality · Lipoquality		LS 13 SCIEX	
	Room B				SY 36 Phenolics & Antioxidants		LS 14 POLA ORBIS	
	Room C				SY 37 Exosome & MicroRNA		LS 15 Nippon Flour Mills	
	Room D				SY 38 Functional Carbohydrates		LS 16 Kewpie	
	Room E				SY 39 Hormesis		LS 17 MIYARISAN PHARMA.	
	Room F				SY 40 Food Science in the Big Data Era		LS 18 Assoc. Salacia Promotion	
	Room G				Flash Talk 1			
	Exhibition	Exhibition						
Poster Room	Poster Viewing							
Dec. 5 (Thu)	3F Entrance	Registration (7:45~) 45			45			
	Room A	Plenary Lectures 7 & 8		SY 53 Human Studies of Functional Food Factors		Closing Ceremony		
	Room B			SY 54 Japanese Diets				
	Room C			SY 55 Skeletal Muscle Health				
	Room D			SY 56 Soy and Isoflavone Metabolites				
	Room E			SY 57* Tomatoes				
	Room F			SY 58* Phytonutrients				



14:00		15:00		16:00		17:00		18:00		19:00	
Registration											
ICoFF/CPH/ISNFF Joint Keynote Lectures										Welcome Reception @Kobe Portopia Hotel ~21:00	
30		30		30		45		30			
SY 7 Bioactive Amino Acids & Proteins		Coffee Break		SY 12 Cancer Chemoprevention						Opening Ceremony & Opening Lecture	
SY 8 Cardiovascular Health				SY 13 Polyphenols: Molecular Mechanisms							
SY 9 Marine Products				SY 14 Sulfur Compounds							
SY 10 Fermented Foods & Beverages				SY 15 Tea							
SY 11 Skin Health				SY 16 Metabolic Syndrome & Diabetes							
YIA Final Competition 1				YIA Final Competition 2							
Exhibition										15	
Poster Viewing										Poster 1	
Registration										45	
SY 23 Brain Health & Function		Coffee Break		SY 29 Antioxidant & Redox Regulation		45		Kobe Night & Travel Award Ceremony @Kobe International Exhibition Hall			
SY 24 Functional Protein & Peptides-2				SY 30 Functional Proteins & Peptides-3							
SY 25 Omics Technologies				SY 31 Allergy & Immune Modulation							
SY 26 Minerals				SY 32 Vitamins							
SY 27* Biomarkers				SY 33 Autophagy & Programmed Cell Death							
SY 28* Health & Beauty				SY 34* Lactoferrin							
Exhibition										15	
Poster Viewing										Poster 2	
Registration										30	
SY 41 Chronobiology & Nutrition/Foods		Coffee Break		SY 47 Labeling System: Functional						Gala Dinner & YIA Ceremony @Kobe Portopia Hotel ~21:30	
SY 42 Global Fermented Foods				SY 48 Probiotics & Prebiotics							
SY 43 Taste & Olfaction				SY 49 JSOFF-ACS Joint Session							
SY 44 Protein Modification & Targeting				SY 50 Herbs & Spices							
SY 45* Collagen Peptide				SY 51 Functional Assessment							
SY 46 Bone Health & Lifestyle				SY 52* Sports & Athletic Performance							
Flash Talk 2				Flash Talk 3							
Exhibition										30	
Poster Viewing										Poster 3	
Poster Removal											

#### Sponsored Symposium

\*SY 6 : San-Ei Gen F.F.I.,Inc.

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\*SY 52 : Amino Up Co., Ltd.

\*SY 57 : KAGOME Co., Ltd.

\*SY 58 : NUTRILITE

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*ICoFF 2019 is organized by  
Japanese Society of Food Factors (JSoFF).*



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Nobuyuki Takahashi	(Tokyo Univ. of Agric.)
Shinichi Ikushiro	(Toyama Pref. Univ.)

## Support Organizations and Academic Societies

The organizing committee would like to express its sincere appreciation to the following organizations for their contribution to the success of the ICoFF2019/ICPH2019/ISNFF2019.

### Prime Support Organizations

Kobe Tourism Bureau · Kobe Convention Bureau  
TSUTOMU NAKAUCHI FOUNDATION

### Support Organizations

The Uehara Memorial Foundation  
The Naito Foundation  
The Tojuro Iijima Foundation for Food Science and Technology

### Support Academic Societies and Institutions

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The Intestinal Microbiology Society/formerly Japan Bifidus Foundation  
Japan Society of Nutrition and Food Science  
Japanese Association for Animal Cell Technology  
Japanese Society for Amino Acid Sciences  
The NARO Bio-Oriented Technology Research Advancement Institution  
The Society of Tea Science of Japan  
The Vitamin Society of Japan  
Royal Society of Chemistry  
Clinical Trial Center for Functional Foods, Chonbuk National University Hospital (Luncheon Seminar)

### Endorsements

Japan National Tourism Organization

Kobe City

The Association for Nobiletin Research, IUFoST-Japan, The Japan Diabetes Society, Japan Polyphenol Society, Japan Society for Bioscience, Biotechnology, and Agrochemistry, Japanese Society of Catechology, The Japan Society for Spice and Herb Research, Japan Society for the Study of Obesity, The Japan Society of Cookery Science, Japan Sports Nutrition Association, Japanese Association for Cancer Prevention, Japanese Association for Food Immunology, The Japanese Biochemical Society, The Japanese Peptide Society, The Japanese Pharmacological Society, Japanese Society for Chronobiology, The Japanese Society for Food Science and Technology, Japanese Society for Medical Use of Functional Foods, Japanese Society for Retinoid Research, Japanese Society of Clinical Nutrition, The Japanese Society of Nutrition and Dietetics, The Japanese Society of Pharmacognosy, Medical and Pharmaceutical Society for WAKAN-YAKU, The Molecular Biology Society of Japan, The Pharmaceutical Society of Japan, The Society for Biotechnology, Japan, Food Science Forum

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The organizing committee would like to express its sincere appreciation to the following companies for their contribution to the success of the ICoFF2019/ICPH2019/ISNFF2019.

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# Conference Information

## Date & Venue

Dates: December 1 (Sun) - 5 (Thu)

Venues:

Kobe International Conference Center

6-9-1, Minatojima-nakamachi, Chuo-ku, Kobe-shi, Hyogo, 650-0046, Japan

TEL: +81-78-302-5200 FAX: +81-78-302-6485

Kobe International Exhibition Hall

6-11-1, Minatojima-nakamachi, Chuo-ku, Kobe-shi, Hyogo, 650-0046, Japan

TEL: +81-78-302-1020 FAX: +81-78-302-1870

Kobe Portopia Hotel

6-10-1, Minatojima-nakamachi, Chuo-ku, Kobe-shi, Hyogo, 650-0046, Japan

TEL: +81-78-302-1111

## Registration

The Registration Desk (3F, Kobe International Conference Center) is open during the following hours:

Nov. 30 (Sat) 14:00 -18:00 Dec. 3 (Tue) 7:45 -18:00

Dec. 1 (Sun) 7:45 -18:00 Dec. 4 (Wed) 7:45 -18:00

Dec. 2 (Mon) 7:45 -18:00 Dec. 5 (Thu) 7:45 -11:00

## Name Badge

Each delegate will receive a name badge upon registration. For security reason, all participants are requested to wear their name badges during all conference activities. No admission to sessions, exhibition and official functions included in the registration fee will be granted without the name badge.

Accompanying person is granted to enter, attend and enjoy the following:

- Exhibition
- Opening Ceremony
- Welcome Reception
- Coffee Break
- Closing Ceremony
- Kobe Night

## Cloakrooms

Cloakrooms are located on the 4th floor of the Kobe International Conference Center and the 2nd floor of the Kobe International Exhibition Hall.

Date	4F, Kobe Int'l Conference Center	2F, Kobe Int'l Exhibition Center
Dec. 1 (Sun)*	7:45-18:00	----
Dec. 2 (Mon)	7:45-18:00	9:00-20:00
Dec. 3 (Tue)	7:45-18:00	9:00-20:00
Dec. 4 (Wed)	7:45-18:00	9:00-19:30
Dec. 5 (Thu)	7:45-13:30	-----

\* Kobe Portopia Hotel has cloak service.



### **Internet Access (free WiFi)**

Kobe International Conference Center / Kobe International Exhibition Hall

ID: Food\_Factor\_Week

PASS: kobe2019

### **Photocopies and Printing (Charge required)**

Photocopy and printing service are available at the venue office (2F, Kobe International Conference Center).

### **Message Board**

A message board will be located at the registration area.

### **Refreshments**

Refreshments are provided on each floor of Kobe International Conference Center and Poster Room at Kobe International Exhibition Hall.

### **Lunch**

Application tickets for luncheon seminars are attached to the name badge of ICoFF2019/ISNFF2019 attendees.

The application ticket must be exchanged to one of the luncheon seminar admission tickets every day. On-Site distribution hours of the admission tickets are between 7:45 and 11:30 each day at the lobby of Room A (1F, Kobe International Conference Center).

### **Exhibition**

The exhibition will be opened on Dec. 2 (Mon), 9:00-17:30, Dec. 3 (Tue), 9:00-17:30, and Dec. 4 (Wed), 9:00-15:30, located in Reception Hall (3F, Kobe International Conference Center).

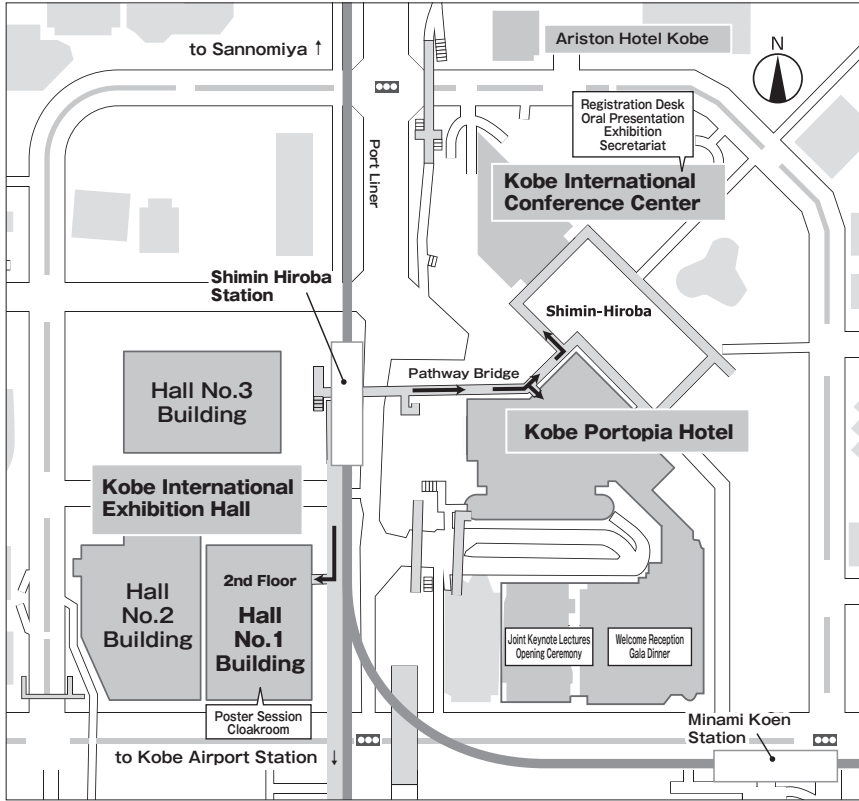
### **ICoFF2019/ICPH2019/ISNFF2019 Secretariat**

The Secretariat Room is located at Room 403 (4F, Kobe International Conference Center).

E-mail: [icoff-icph2019@jtbc.com.co.jp](mailto:icoff-icph2019@jtbc.com.co.jp)

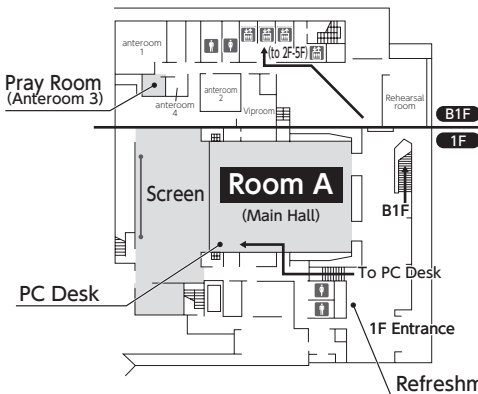
TEL: +81-78-302-6900 (Nov. 28-Dec. 5)

# Area Map & Floor Guide

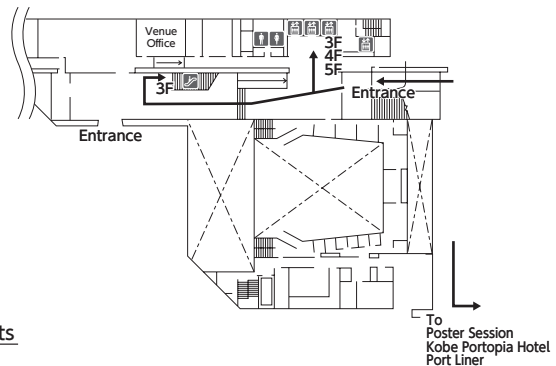


## Kobe International Conference Center

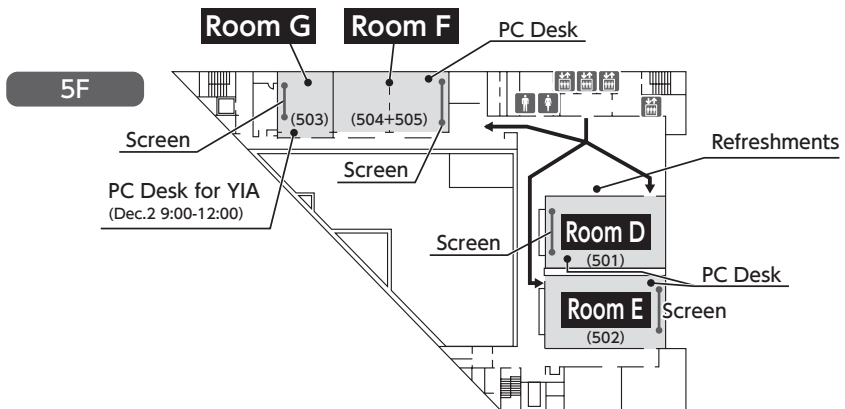
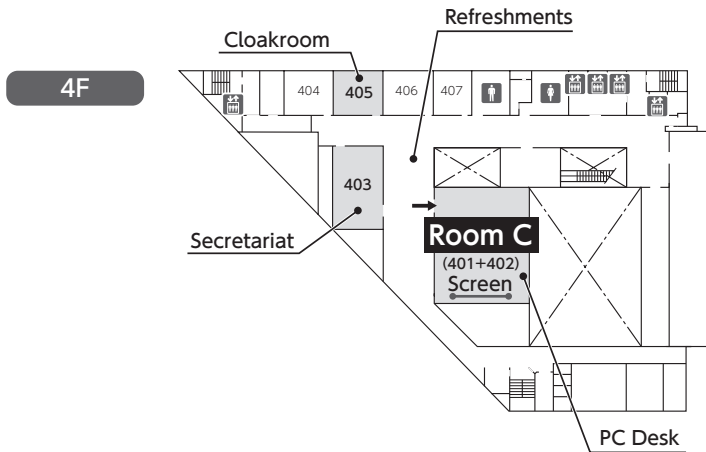
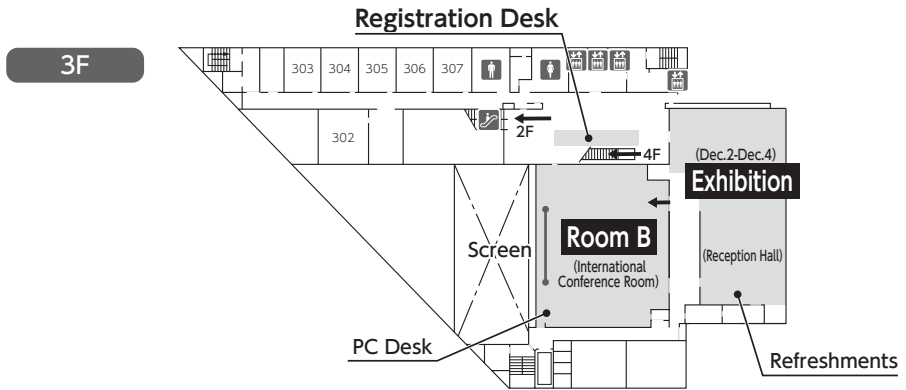
**B1F · 1F**



**2F**

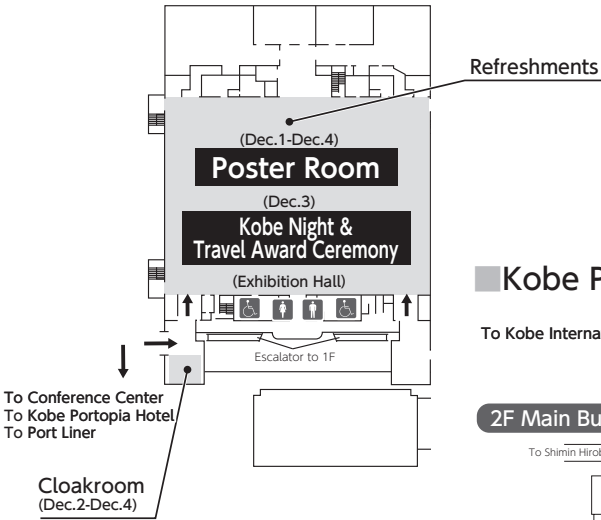


# Kobe International Conference Center



# Kobe International Exhibition Hall

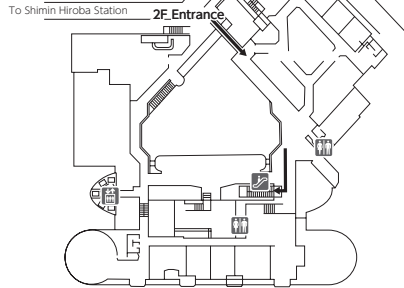
## 2F Hall No.1 Building



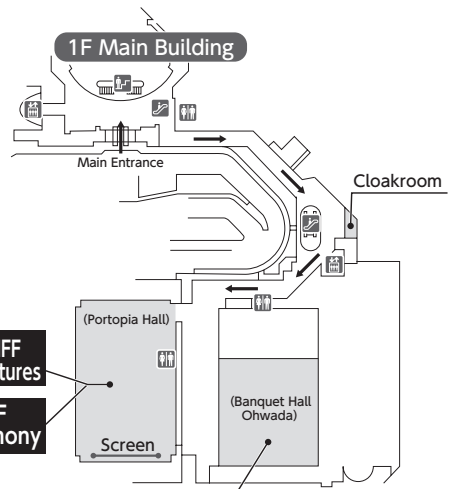
## Kobe Portopia Hotel

To Kobe International Conference Center

### 2F Main Building



### 1F Main Building



Welcome Reception(Dec.1)  
Gala Dinner(Dec.4)

### 1F South Building

## Social Programs

### Opening Ceremony & Opening Lecture

Date & Time: 17:45-18:30, Dec. 1 (Sun)

Venue: Portopia Hall, Kobe Portopia Hotel

### Welcome Reception

Date & Time: 19:00-21:00, Dec. 1 (Sun)

Venue: Banquet Hall Ohwada, 1F South Building, Kobe Portopia Hotel

### Kobe Night & Travel Award Ceremony

Date & Time: 17:45-19:15, Dec. 3 (Tue)

Venue: 2F Exhibition Hall, Hall No.1 Building, Kobe International Exhibition Hall

\*Winners of Travel Awards will be awarded at the Kobe Night.

\*All participants are welcome. Light meal, sweets and drinks are provided.

### Gala Dinner & YIA Ceremony

Date & Time: 19:30-21:30, Dec. 4 (Wed)

Fee: JPY15,000

Venue: Banquet Hall Ohwada, 1F South Building, Kobe Portopia Hotel

Style: Buffet / Smart Casual

\*Advance ticket purchase is required to participate the Gala Dinner.

Winners of Young Investigators Awards will be announced and awarded at the Gala Dinner. Please be noted that the awards may be stripped if the winners do not appear in the ceremony.

### Travel Award Ceremony

Winners of Travel Awards will be awarded at the Kobe Night.

### Closing Ceremony

Date & Time: 12:00-12:30, Dec. 5 (Thu)

Venue: Room A (1F, Main Hall, Kobe International Conference Center)

# Instruction for Oral Sessions

## For Invited speakers and selected oral presentations

### **Speakers should note the following information:**

Please make sure to be in the session room and notify the conference staff at least 20 minutes before the session starts.

All speakers are requested to bring their own PC or the data on a USB memory stick for presentation. The session rooms are equipped with a Windows laptop PC and LCD projector on which Microsoft PowerPoint is installed (OS: Windows10, Software: Microsoft PowerPoint 2010, 2013, 2016). Slides with aspect ratio of 4:3 is recommended for presentations.

### **Those who bring their data in USB memory stick:**

Speakers who bring their presentation data by a USB memory stick are required to use the Windows format. The name of the file should be labeled with session number and their name as follows:  
e.g. SY00-00\_Name.ppt

Speakers are asked to submit their data to the PC desk in the session room before your assigned session starts.

### **Those who use their own laptop:**

In case the presenter use Macintosh or special software except PowerPoint 2010, 2013, 2016 for presentation, it is recommended to use their own laptop. PCs must have a display output interface with a D-sub 15-pin plug. If necessary, bring an adaptor.

To avoid unexpected problems, it is highly recommended to check the connection or compatibility of own PC with the video projector on the podium in the session room of you will present by the Coffee break / Lunch time before your presentation.

### **For Speakers of Joint Keynote Lectures:**

Speakers of Joint Keynote Lectures are requested to submit their data at the Secretariat (Room 403) by 10:00, Dec. 1.

### **For YIA Presenters**

YIA presenters are asked to prepare a presentation data in PowerPoint format and bring the data by a USB memory stick. Please be sure to copy the data to PC in Room G (5F, Room 503) in the morning of the session date.

#### **Data submission for YIA presentations**

Open hour: Dec. 2, 9:00-12:00

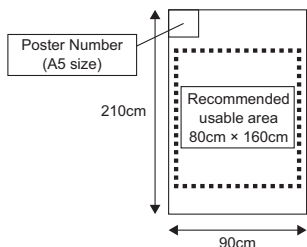
Place: Room G (5F, Room 503)

## For Session Chairs

Please make sure to be in the session room and notify the conference staff at least 20 minutes before the session starts. We are grateful for your cooperation to respect strictly the timing assigned to the session.

## Instruction for Poster Sessions

Poster Sessions will be held in Kobe International Exhibition Hall.



Each poster presentation is allotted one poster board as shown left. All presenters for Poster Sessions are responsible for mounting and removing their own posters on the designated poster board with the pins which will be available at the Poster Room.

Any other equipment or electricity for use of image/video projection will not be provided.

### Schedule

	Mounting	Core Time		Removal
		Odd Numbers	Even Numbers	
Poster 1	Dec. 2 (Mon.) 9:00-12:00	Dec. 2 (Mon.) 17:45-18:30	Dec. 2 (Mon.) 18:30-19:15	Dec. 4 (Wed.) 19:00 -19:30
Poster 2		Dec. 3 (Tue.) 17:45-18:30	Dec. 3 (Tue.) 18:30-19:15	
Poster 3		Dec. 4 (Wed.) 17:30-18:15	Dec. 4 (Wed.) 18:15-19:00	

Posters remaining after the removal due time will be removed and disposed by the Secretariat.

List of categories and presentation date is shown in next page.

**List of Poster Categories and Session date** (assigned date are marked by “√”).

	Category	No	Poster 1 Dec 2	Poster 2 Dec 3	Poster 3 Dec 4
A) Sources and Products	Fermented Foods and Beverages	PA01	✓		
	Fruits and Vegetables	PA02	✓		
	Herbs and Spices	PA03			✓
	Japanese Diet	PA04	✓		
	Marine Products	PA05	✓		
	Soy and Legumes	PA06			✓
	Tea, Coffee and Cocoa	PA07	✓		
	Others	PA08			✓
B) Food Factors	Amino Acids	PB01	✓		
	Carbohydrates	PB02			✓
	Carotenoids	PB03		✓	
	Lipids	PB04	✓		
	Minerals	PB05		✓	
	Peptides and Proteins	PB06		✓	
	Polyphenols and Antioxidants	PB07			✓
	Probiotics and Prebiotics	PB08			✓
	Sulfur Compounds	PB09	✓		
	Vitamins	PB10		✓	
	Others	PB11		✓	
C) Functions and Mechanisms	Allergy and Immune Modulation	PC01		✓	
	Anti-inflammation	PC02		✓	
	Autophagy	PC03		✓	
	Bioavailability and Metabolism	PC04	✓		
	Bone Health	PC05			✓
	Brain Health	PC06		✓	
	Cancer Chemoprevention	PC07	✓		
	Cardiovascular Health	PC08	✓		
	Chronobiology	PC09			✓
	Exercise and Skeletal Muscle Health	PC10			✓
	Exosome and microRNA	PC11			✓
	Gastrointestinal Health and Diseases	PC12		✓	
	Metabolic Syndrome, Obesity and Diabetes	PC13	✓		
	Molecular Targets of Food Factors	PC14		✓	
	Nutritional Regulation of Epigenetics	PC15		✓	
	Protein Modification by Food Factors	PC16			✓
	Redox Regulation	PC17		✓	
	Skin Health	PC18	✓		
	Others	PC19			✓
D) Others	Analytical Methods and Omics Technologies	PD01		✓	
	Animal Cell Technology	PD02		✓	
	Biomarkers	PD03		✓	
	Epidemiology	PD04		✓	
	Food Hygienics	PD05			✓
	Food Processing	PD06			✓
	R&D of Functional Foods and Nutraceuticals	PD07		✓	
	Taste and Olfaction	PD08			✓
	Others	PD09			✓



## December 1

## ICoFF Pre-symposium

10:00-11:30 Room B

ICPH2019 Symposium 15 / Co-organized by Royal Society of Chemistry

**Polyphenols: The road from plants to functional foods**

**Chairs:** Christine Morand (Natl. Inst. for Agric. Res. (INRA), France)  
Kevin D. Croft (Univ. of Western Australia, Australia)

10:00 **Introduction****PSY-1 Polyphenols and digestion process: Targeting the multiple gut functionalities**10:05 Vincenzo Fogliano*Food Quality and Design group, Wageningen Univ., The Netherlands***PSY-2 Bioavailability of cocoa flavan-3-ols**10:25 Alan Crozier<sup>1</sup>, Javier Ottaviani<sup>2</sup>, Colin Kay<sup>3</sup>, Chris Gill<sup>4</sup>, Reedmond Fong<sup>1</sup>, Gina Borges<sup>1</sup>, Hagen Schroeter<sup>2</sup>*<sup>1</sup>Univ. of California, USA, <sup>2</sup>Mars Inc, McLean, USA, <sup>3</sup>North Carolina State Univ., USA, <sup>4</sup>Univ. of Ulster, Northern Ireland, UK***PSY-3 Vascular health benefits of high flavonoid apples**10:45 Jonathan M. Hodgson*Sch. of Med. and Health Sci., Edith Cowan Univ., Australia***PSY-4 Identification of the biochemical mechanisms involved in the health benefits of plant (poly)phenols**11:05 Cesar G. Fraga<sup>1,2,3</sup>*<sup>1</sup>Fisicoquímica, Facultad de Farmacia y Bioquímica, Universidad de Buenos Aires, Argentina, <sup>2</sup>CONICET-Universidad de Buenos Aires, IBIMOL, Argentina, <sup>3</sup>Dept. of Nutr., Univ. of California, USA*11:25 **Closing Remarks**

## Special Lecture

12:45-13:30 Room B

**SL Best practices for success in publishing your work in AJP - endocrinology & metabolism**12:45 André Marette<sup>1,2</sup>*<sup>1</sup>Editor-in-Chief, AJP: Endocrinology and Metab., USA, <sup>2</sup>IUCPQ and INAF Res. Centers, Laval Univ., Canada*

**Joint Keynote Lectures****14:00-17:45 Portopia Hall****ICoFF/ICPH/ISNFF Joint Session****Starter:** Hitoshi Ashida (Kobe Univ., Japan)**Chair:** Akira Murakami (Univ. of Hyogo, Japan)**KL1 Anticarcinogenic and chemopreventive substances in food: An update**14:00 Young-Joon Surh  
*Coll. of Pharm., Seoul Natl. Univ., Korea***Chair:** Naomi Osakabe (Shibaura Inst. of Technol., Japan)**KL2 Cancer prevention by food-derived phytochemicals**14:35 Zigang Dong  
*The Hormel Inst., Univ. of Minnesota, USA***Chair:** Hiroshige Itakura (Shinagawa Eastone Medical Clinic, Japan)**KL3 Novel physiological function of bile acid and a food factor that mimics its function**15:10 Ryuichiro Sato  
*Dept. of Appl. Biol. Chem., Grad. Sch. of Agric. Life Sci., Univ. of Tokyo, Japan***Intermission****Chair:** Kayoko Shimoi (Univ. of Shizuoka, Japan)**KL4 Contribution of plant food bioactives in promoting health effects of plant foods – why look at interindividual variability?**16:00 Christine Morand  
*Université Clermont Auvergne, INRA, UNH, Unité de Nutr. Humaine, France***Chair:** Junji Terao (Konan Women's Univ., Japan)**KL5 Dietary polyphenols for cardiovascular health**16:35 Kevin D. Croft  
*Sch. of Biomedical Sci., Univ. of Western Australia, Australia***Chair:** Kenji Sato (Kyoto Univ., Japan)**KL6 Phenolipids in food: bioactivities and health effects**17:10 Fereidoon Shahidi  
*Dept. of Biochem., Memorial Univ. of Newfoundland, Canada***Opening Ceremony & Opening Lecture****17:45-18:30 Portopia Hall****Chair:** Tsutomu Nakayama (Tokyo Univ. of Agric., Japan)**OL Development and application of novel biomarkers for human studies of functional food factors**17:45 Toshihiko Osawa<sup>1,2</sup>  
<sup>1</sup>Dept. of Health & Nutr., Fac. of Psyc. Phys. Sci, Aichi Gakuin Univ., Japan, <sup>2</sup>Dept. of Health Food Sci., Fac. of Human Sci., Univ. of Human Arts & Sci., Japan

## December 2

### Plenary Lectures 1 & 2

8:30-9:30 Room A

Chair: Kenji Sato (Kyoto Univ., Japan)

**PL1 Prevention of NCD by marine nutraceuticals and the future direction**

8:30

Kazuo Miyashita

*Dept. of Bioresour. Chem., Fac. of Fish. Sci., Hokkaido Univ., Japan*

Chair: Akira Murakami (Univ. of Hyogo, Japan)

**PL2 Linking chemical measurements with sensorial correlates to understand consumer liking and product quality**

9:00

Alyson E. Mitchell<sup>1</sup>, Lillian Franklin<sup>1</sup>, Dawn Chapman<sup>2</sup>, Guangwei Huang<sup>3</sup>

*<sup>1</sup>Dept. Food Sci. & Tech., Univ. of California, USA, <sup>2</sup>Covance Food Solutions, USA, <sup>3</sup>Almond Board of California, USA*

### Symposium 1

10:00-12:00 Room A

#### Washoku – Traditional Japanese Cuisine

**Organizer:** Tsuyoshi Tsuduki (Tohoku Univ., Japan)

**Chairs:** Hanae Yamazaki (Ryukoku Univ., Japan)

Tsuyoshi Tsuduki (Tohoku Univ., Japan)

10:00 **Overview**

**SY01-1 Biochemical efficacy of Washoku ~ anti-oxidant, anti-glycation aspects of Washoku ~**

10:01

Mitsuko Itoh<sup>1,2,3</sup>

*<sup>1</sup>Dept. of Pediatrics, The Univ. of Tokyo Hosp., Japan, <sup>2</sup>Dept. of Public Health/Health Policy, The Univ. of Tokyo, Grad. Sch. of Med., Japan, <sup>3</sup>Akasaka Family Clinic, Japan*

**SY01-2 The effects of Dashi (Japanese soup) on mood states and autonomic nervous system activity**

10:30

Hanae Yamazaki

*Dept. of Food Sci. and Human Nutr., Fac. of Agric., Ryukoku Univ., Japan*

**SY01-3 Dietary approach for the prevention of cognitive decline and frailty: Findings from a longitudinal epidemiological study among Japanese**

10:59

Rei Otsuka<sup>1</sup>, Hidenori Arai<sup>2</sup>

*<sup>1</sup>Section of NILS-LSA, Cent. for Gerontology and Soc. Sci., Natl. Cent. for Geriatrics and Gerontology, Japan, <sup>2</sup>Natl. Cent. for Geriatrics and Gerontology, Japan*

**SY01-4 Local and regional Japanese cooking –Many washokus?–**

11:28 Greg de St. Maurice  
*Fac. of Business and Commerce, Keio Univ., Japan*

11:57 **Closing Remarks**

**Symposium 2**

**10:00-12:00 Room B**

**Nutritional Challenges & Potential Health Benefits of Functional Foods, Nutraceuticals & Dietary Supplements**

**Organizers:** Harunobu Amagase (Hiroshima Univ., Japan)  
Norio Yamamoto (House Wellness Foods Co., Japan)  
**Chairs:** Chi-Tang Ho (Rutgers Univ., USA)  
Harunobu Amagase (Hiroshima Univ., Japan)

**SY02-1 Comparison of food functionality, nutrition claims and labeling rule applied to the consumer products in Japan and US**

10:00 Harunobu Amagase<sup>1,2,3</sup>  
*<sup>1</sup>Hiroshima Univ., Japan, <sup>2</sup>Tohoku Univ., Japan, <sup>3</sup>Association of Intl. Food and Nutr. (AIFN), Japan*

**SY02-2 Health benefits of nigerooligosaccharides and its enzymatic bio-production from maltose by  $\alpha$ -glucosidase**

10:20 Bo Jiang, Xiaoyan Wang  
*State Key Lab. of Food Sci. and Technol., Jiangnan Univ., China*

**SY02-3 Polymethoxyflavones from citrus peels as anti-obesity functional food ingredients**

10:55 Chi-Tang Ho<sup>1</sup>, Shiming Li<sup>1</sup>, Min-Hsiung Pan<sup>2</sup>  
*<sup>1</sup>Dept. of Food Sci., Rutgers Univ., USA, <sup>2</sup>Inst. of Food Sci and Technol., Natl. Taiwan Univ., Taiwan*

**SY02-4 Potential properties of astaxanthin for anti-atherosclerotic functions**

11:20 Hiroshi Yoshida  
*Dept. of Lab. Med., The Jikei Univ. Kashiwa Hosp., Japan*

**SY02-5 Lifestyle related changes with partially hydrolyzed guar gum fiber in healthy athletes: Randomized, crossover, placebo-controlled gut microbiome study**

11:45 Mahendra P. Kapoor<sup>1</sup>, Masaaki Koido<sup>2</sup>, Mikiko Kawaguchi<sup>3</sup>, Makoto Ozeki<sup>1</sup>, Takayuki Mitsuya<sup>1</sup>  
*<sup>1</sup>Taiyo Kagaku Co. Ltd., Nutr. Div., Japan, <sup>2</sup>Univ. of Tsukuba, Fac. of Health & Sport Sci., Japan, <sup>3</sup>Otsuna Women's Univ., Fac. of Home Economics, Japan*

**Symposium 3****10:00-12:00 Room C****Fruits & Vegetables: Health Beneficial Components and High-Value-Added Products**

- Organizers:** Minoru Sugiura (Doshisha Women's Coll. of Liberal Arts, Japan)  
 Jae-Hak Moon (Chonnam Natl. Univ., Korea)  
 Yasujiro Morimitsu (Ochanomizu Univ., Japan)
- Chairs:** Akira Yano (Iwate Biotechnol. Res. Cent., Japan)  
 Mariusz K. Piskula (Polish Academy of Sciences, Poland)  
 Yasujiro Morimitsu (Ochanomizu Univ., Japan)

10:00 **Opening Remarks****SY03-1 Does  $\beta$ -cryptoxanthin prevent lifestyle –related diseases?-Findings from the recent nutritional epidemiologic survey–**

10:05

Minoru Sugiura*Dept. of Food Sci. and Nutr., Doshisha Women's Coll. of Liberal Arts, Japan***SY03-2 Absorption and metabolism of phenolic acids contained in pear (*Pyrus pyrifolia*)**

10:25

Jae-Hak Moon, Jeong-Yong Cho*Dept. of Food Sci. and Tech., Chonnam Natl. Univ., Korea***SY03-3 Betalains in plasma and urine after a long-term exposure to fermented red beet juice**

10:45

Mariusz K. Piskula<sup>1</sup>, Ewa Romaszko<sup>2</sup>, Wieslaw Wiczkowski<sup>1</sup>*<sup>1</sup>Inst. of Animal Reproduction and Food Res., Polish Academy of Sciences, Poland, <sup>2</sup>NZOZ Atarax Outpatient Clinic, Poland***SY03-4 Breeding high nutritious vegetable varieties and construction of value chains**

11:05

Naoki Tominaga*Physiol. and Biochem. Res. Div., Takii & Co., Ltd, Japan***SY03-5 “The Winter Sweet Spinach” as a functional food**

11:25

Akira Yano*Dept. of Bioresource Sci., Iwate Biotechnol. Res. Cent., Japan***SY03-6 Effect of different elicitors in the carotenoid metabolism of butterhead lettuce (*Lactuca sativa* var. *capitata*) cultivated under hydroponic conditions**

11:45

F.E. Jimenez-Hernandez, de la Rosa L.A. Gonzalez-Fernandez R.<sup>1</sup>E. Álvarez-Parrilla<sup>1</sup>, J. Valero-Galván, J. Rodrigo-García<sup>2</sup>*<sup>1</sup>Dept. Ciencias Químico Biológicas, Instituto de Ciencias Biomédicas, Universidad Autónoma de Ciudad Juárez, México**<sup>2</sup>Dept. Ciencias de la Salud, Instituto de Ciencias Biomédicas, Universidad Autónoma de Ciudad Juárez, México*11:55 **Closing Remarks**

**Symposium 4****10:00-12:00 Room D****Absorption, Bioavailability & Metabolism**

The Biological Responses against Inter/Intra Environment Research Association/ICoFF Joint Symposium

**Organizers:** Hideo Satsu (Maebashi Inst. of Technol., Japan)  
 Yoichi Sakakibara (Univ. of Miyazaki, Japan)  
 Ming Hu (Univ. of Huston, USA)

**Chairs:** Shinichi Ikushiro (Toyama Pref Univ., Japan)  
 Miyu Nishikawa (Toyama Pref. Univ., Japan)

10:00 **Overview****SY04-1 Redefining enterohepatic recycling of flavonoids and polyphenols: Impact on systemic and local exposure**

10:05

Ming Hu*Univ. of Houston, Coll. of Pharm., USA***SY04-2 Comparative evaluation of glucuronide regio-isomers of polyphenols**

10:35

Miyu Nishikawa<sup>1</sup>, Kaori Yasuda<sup>2</sup>, Toshiyuki Sakaki<sup>2</sup>, Shinichi Ikushiro<sup>1</sup><sup>1</sup>Fac. of Biotech., Dept. of Engineer., Toyama Pref. Univ., Japan, <sup>2</sup>Fac. of Pharm., Dept. of Engineer., Toyama Pref. Univ., Japan**SY04-3 Systemic network for phosphate homeostasis in the body**

11:00

Hiroko Segawa, Ichiro Kaneko, Ken-ichi Miyamoto*Dept. of Appl. Nutr., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch., Japan***SY04-4 Bioavailability of 12 isoflavones of soybean [*Glycine max* (L.) Merr] using simulated digestion and human intestinal Caco-2 cells**

11:30

Mi-Seon Kim<sup>1</sup>, Davin Jang<sup>1</sup>, Young S. Jung<sup>1</sup>, Hong-Sik Kim<sup>2</sup>, Nam S. Han<sup>3</sup>, Dae-Ok Kim<sup>1</sup><sup>1</sup>Dept. of Food Sci. and Biotechnol., Kyung Hee Univ., Korea, <sup>2</sup>Upland Crop Breed. Res. Div., Natl. of Crop Sci., RDA, Korea, <sup>3</sup>BK21 Cent. for Bio-Resour. Dev., Div. of Anim., Hortic. and Food Sci., Chungbuk Natl. Univ., Korea**SY04-5 Absorption and metabolic behavior of hesperidin (rutinosylated hesperetin) after single oral administration to Sprague-Dawley rat**

11:45

Alexia Nectoux<sup>1</sup>, Chizumi Abe<sup>1</sup>, Shu-Wei Huang<sup>1</sup>, Naoto Ohno<sup>1</sup>, Haruo Yamamura<sup>2</sup>, Toshiro Matsui<sup>1</sup><sup>1</sup>Dept. of Biosci. and Biotechnol., Div. of Biores. and Bioenviron. Sci., Grad. Sch. of Agric., Kyushu Univ., Japan, <sup>2</sup>Charle Co., Japan

**Symposium 5****10:00-12:00 Room E**

Supported by J-OIL MILLS, INC.

**Functional Lipids**

**Organizers & Chairs:** Suk-Hoo Yoon (Woosuk Univ., Korea)  
 Masao Yamasaki (Univ. of Miyazaki, Japan)  
 Tatsuya Sugawara (Kyoto Univ., Japan)

**SY05-1 Control of skin microbiome with fatty acids**

10:00 Toshihiro Nagao<sup>1</sup>, Ayaka Uyama<sup>2</sup>, Shigemitsu Tanaka<sup>1</sup>, Teizo Sugino<sup>2</sup>  
<sup>1</sup>Osaka Res. Inst. of Ind. Sci. and Technol., Japan, <sup>2</sup>Momotani Juntenkan Ltd., Japan

**SY05-2 Omega3-PUFA containing glycerolipids in metabolic syndrome**

10:20 Koji Nagao  
 Appl. Biochem. Food Sci. Course, Fac. of Agric., Saga Univ., Japan

**SY05-3 Importance of intestinal OEA signaling on lipid absorption and feeding behavior**

10:40 Miki Igarashi  
 Tokyo Univ. of Agric. and Technol., Japan

**SY05-4 Functional lipid production from food-derived oil using intestinal bacteria**

11:00 Shigenobu Kishino, Jun Ogawa  
 Div. of Appl. Life Sci, Grad. Sch. of Agric., Kyoto Univ., Japan

**SY05-5 Oxidative stabilization and destabilization of bioactive lipids by natural antioxidant**

11:20 Suk-Hoo Yoon  
 Dept. Food Sci. Biotechnol. Woosuk Univ., Korea

**SY05-6 The effect of tea polyphenols on the antioxidant role of goose intestinal epithelial cells**

11:40 Jing Fu<sup>1,2</sup>, Tong Lin<sup>3</sup>, Chunpeng Liu<sup>1,2</sup>, Yunbo Tian<sup>1,2</sup>  
<sup>1</sup>Coll. of Animal Sci., Zhongkai Univ. of Agric. and Eng., China, <sup>2</sup>Guangdong Province Key Lab. of Waterfowl Healthy Breeding, China, <sup>3</sup>Coll. of Animal Sci. and Technol., Northeast Agric. Univ., China

**Symposium 6****10:00-12:00 Room F**

Sponsored by San-Ei Gen F.F.I., Inc.

**The Effects of Highly Bioavailable Quercetin Glycoside and Curcumin**

Chair: Hideyuki Orikoshi (San-Ei Gen F.F.I., Inc., Japan)

**SY06-1 Anti-dyslipidemia effect and its mechanism by amorphous curcumin**10:00 Tomohiro Nakao<sup>1,2</sup>, Kazuya Nagano<sup>2,3</sup>, Keigo Kinoshita<sup>1</sup>, Makoto Sakata<sup>1</sup>, Masayuki Nishino<sup>1</sup>, Hirofumi Tsujino<sup>2</sup>, Kazuma Higashisaka<sup>2,3</sup>, Yasuo Tsutsumi<sup>2,3,4</sup><sup>1</sup>San-Ei Gen F. F. I., Japan, <sup>2</sup>Grad. Sch. Pharm. Sci., Osaka Univ., Japan, <sup>3</sup>Grad. Sch. Med., Osaka Univ., Japan, <sup>4</sup>MEIC, Osaka Univ., Japan**SY06-2 Developmental exposure effect of polyphenolic antioxidants on central nervous system**

10:30

Makoto Shibutani, Rena Okada, Takaharu Tanaka, Yasunori Masubuchi, Junta Nakahara  
Lab. of Vet., Pathol., Div. of Anim. Life Sci., Inst. of Agric., Tokyo Univ. of Agric. Tech., Japan**SY06-3 Flavonoids for allergic diseases**11:00 Toshio Tanaka<sup>1,2</sup><sup>1</sup>Dept. of Clinical Application of Biologics, Osaka Univ. Grad. Sch. of Med., Japan, <sup>2</sup>Medical Affairs Bureau, Osaka Habikino Med. Cent., Japan**SY06-4 Enzymatically modified isoquercitrin (EMIQ®) improves endothelial function in volunteers at risk of cardiovascular disease**

11:30

Kevin D. Croft<sup>1</sup>, Nicola P. Bondonno<sup>1,2</sup>, Catherine P. Bondonno<sup>1,2</sup>, Natalie C. Ward<sup>1,3</sup>, Richard J. Woodman<sup>4</sup>, Jonathan M. Hodgson<sup>1,2</sup><sup>1</sup>Sch. of Biomed. Sci., Univ. of Western Australia, Royal Perth Hosp., Australia, <sup>2</sup>Sch. of Med. and Health Sci., Edith Cowan Univ., Australia, <sup>3</sup>Sch. of Public Health and Curtin Health Innovation Res. Inst., Curtin Univ., Australia, <sup>4</sup>Centre. for Epidemiol. and Biostatistics, Sch. of Public Health, Flinders Univ. of South Australia, Australia



**Symposium 7****13:30-15:00 Room A**

Co-organized by the Japanese Society for Amino Acid Sciences

**Bioactive Amino Acids & Proteins**

**Organizers:** Yoshiharu Shimomura (Chubu Univ., Japan)  
Ara Koh (Univ. of Gothenburg, Sweden)

**Chairs:** Yoshiharu Shimomura (Chubu Univ., Japan)  
Tsutomu Fukuwatari (Univ. of Shiga Pref., Japan)  
Hideo Satsu (Maebashi Inst. of Technol., Japan)

**SY07-1 Mechanistic studies of microbially produced imidazole propionate on the host signaling pathway**

13:30

Ara Koh<sup>1</sup>, Fredrik Bäckhed<sup>1,2</sup><sup>1</sup>Univ. of Gothenburg and Sahlgrenska Univ. Hosp., Sweden, <sup>2</sup>Univ. of Copenhagen, Denmark**SY07-2 Sarcopenia and amino acid nutrition**

13:55

Hisamine Kobayashi*Business Strategy & Planning Dept. AminoScience Div., Ajinomoto Co., Inc., Japan***SY07-3 Should taurine be rich in heart and muscle for longevity?**

14:20

Takashi Ito<sup>1</sup>, Stephen W. Schaffer<sup>2</sup><sup>1</sup>Grad. Sch. of Biosci. Biotechnol., Fukui Pref. Univ., Japan, <sup>2</sup>Coll. of Med., Univ. of South Alabama, USA**SY07-4 Identification and safety evaluation of hydroxymethylfurfural-amino acid adducts in thermal processing food**

14:45

Shiyi Ou, Jie Zheng*Dept. of Food Sci. and Eng., Jinan Univ., China***Symposium 8****13:30-15:00 Room B****Cardiovascular Health**

**Organizers:** Harumi Kondo (Nihon Univ., Japan)

Katsuko Kajiya (Kagoshima Univ., Japan)

**Chairs:** Cesarettin Alasalvar (TÜBİTAK MAM, Turkey)

Sei Kobayashi (Yamaguchi Univ., Japan)

**SY08-1 Nuts and cardiovascular health**

13:30

Cesarettin Alasalvar*TÜBİTAK MAM Food Inst., Turkey***SY08-2 Green tea and cardiovascular disease**

13:50

Yukihiko Momiyama<sup>1</sup>, Yoshimi Kishimoto<sup>2</sup>, Kazuo Kondo<sup>2</sup><sup>1</sup>Dept. of Cardiol., Natl. Hosp. Organization Tokyo Med. Cent., Japan, <sup>2</sup>Endowed Res. Dept. "Food for Health", Ochanomizu Univ., Japan

**SY08-3 Is salmon stomach a good remedy for heart failure prevention? –Don't**14:10 **throw away and do eat salmon stomach–**Hiroyuki Kaiya<sup>1</sup>, Minoru Kihara<sup>2</sup>, Hidekazu Katayama<sup>3</sup>, Masazumi Nishikawa<sup>4</sup><sup>1</sup>Dept. of Biochem., Natl. Cereb. Cardiovascul. Cntr. Res. Inst., Japan, <sup>2</sup>Sch. of Biol. Sci., Tokai Univ., Japan, <sup>3</sup>Sch. of Eng., Tokai Univ., Japan, <sup>4</sup>Sch. of Food Agric. and Environ. Sci., Miyagi Univ., Japan**SY08-4 Discovery of food components which inhibits novel signaling molecules regulating both vasospasm and cancer cell migration**

14:30

Sei Kobayashi, Bochao Lyu, Min Zhang, Ying Zhang, Hiroko Kishi, Tomoka Morita, Katsuko Kajiya*Dept. of Molecular and Cellular Physiol., Yamaguchi Univ. Grad. Sch. of Med., Japan***SY08-5 Achieving successful outcomes and hallmarks of quality clinical trials**

14:50

Najla Guthrie*KGK Sci., Canada***Symposium 9****13:30-15:00 Room C****Marine Products****Organizer:** Masashi Hosokawa (Hokkaido Univ., Japan)**Chairs:** Meng-Tsan Chiang (National Taiwan Ocean Univ., Taiwan)

Masashi Hosokawa (Hokkaido Univ., Japan)

**SY09-1 Chitosan ameliorates fatty liver in high-fat diet-fed rats**

13:30

Meng-Tsan Chiang<sup>1</sup>, Shing-Hwa Liu<sup>2</sup>, Ching-Ming Shi<sup>1</sup>, Chen-Yuan Chiu<sup>3</sup><sup>1</sup>Dept. of Food Sci., Coll. of Life Sci., Natl. Taiwan Ocean Univ., Taiwan, <sup>2</sup>Grad. Inst. of Toxicology, Coll. of Med., Natl. Taiwan Univ., Taiwan, <sup>3</sup>Inst. of Food Safety and Health, Coll. of Public Health, Natl. Taiwan Univ., Taiwan**SY09-2 Role of functional lipids in preventing obesity-related diseases –Focus on minor compounds in common marine products–**

13:55

Fumiaki Beppu<sup>1</sup>, Naohiro Gotoh<sup>2</sup><sup>1</sup>Fac. of Fish. Sci., Hokkaido Univ., Japan, <sup>2</sup>Dept. of Food Sci. and Technol., Tokyo Univ. of Marine Sci. and Technol., Japan**SY09-3 Imidazole dipeptide, Deoxyribonucleic acid, and Salmon milt peptides**

14:20

**– Development of functional foods from marine under-utilized resources –**Yoshinori Takahashi*Cent. Res. Inst., Maruha Nichiro Co., Japan***SY09-4 Neuroprotective effects of phlorotannin-rich fraction *ecklonia cava* on hydrogen peroxide-induced apoptosis in PC-12 cells**

14:45

Yong Sub Shin<sup>1</sup>, Mi-Gi Lee<sup>2</sup>, Soo-Im Choi<sup>3</sup>, Gun-Hee Kim<sup>3</sup>, Sueungmok Cho<sup>4</sup>,Ho Jin Heo<sup>5</sup>, Dae-Ok Kim<sup>1</sup><sup>1</sup>Kyung hee Univ., Korea, <sup>2</sup>GBSA, Korea, <sup>3</sup>Duksung Women's Univ., Korea, <sup>4</sup>Pukyong Natl Univ., Korea, <sup>5</sup>Gyeongsang Natl Univ., Korea

**Symposium 10****13:30-15:00 Room D****Fermented Foods & Beverages****Organizers & Chairs:** De-Xing Hou (Kagoshima Univ., Japan)

Yelian Miao (Nanjing Tech Univ., China)

13:30 **Overview****SY10-1 Production of high-quality frozen dough by the combination of freeze-tolerant baker's yeast and chemical leavening agents**

13:35

Yelian Miao<sup>1</sup>, Na Li<sup>1</sup>, Li Xing<sup>1</sup>, Yanping Zhang<sup>2</sup>, Fa Lu<sup>3</sup><sup>1</sup>Coll. of Food Sci. and Light Ind. Tech., Nanjing Tech Univ., China, <sup>2</sup>Danyang Tongle Flour Co., Ltd., China, <sup>3</sup>Biotech. Res. Inst., Angel Yeast Co., Ltd., China**SY10-2 Health benefits of "Shochu," a Japanese traditional spirit**

14:00

Kayu Okutsu

Fac. of Agric., Education and Res. Cent. for Fermentation Studies, Kagoshima Univ., Japan

**SY10-3 Development of food materials focusing on the fungus body of koji mold and its analysis of physiological functions**

14:20

Toshiki Kosakai<sup>1</sup>, Cho Sho<sup>1</sup>, Kuniaki Kawano<sup>1</sup>, Masao Yamasaki<sup>2</sup>, Ken-ichi Iwai<sup>1</sup><sup>1</sup>Kirishima Shuzo Co., Ltd., Japan, <sup>2</sup>Grad. Sch. of Agric., Univ. of Miyazaki, Japan**SY10-4 Metabolomics-based research for the classification of tempe from different regions and production processes in Indonesia**

14:40

Adinda D. Kadar<sup>1</sup>, Pingkan Aditiawati<sup>2</sup>, Made Astawan<sup>3</sup>, Sastia P. Putri<sup>1</sup>, Eiichiro Fukusaki<sup>1</sup><sup>1</sup>Dept. of Biotech., Grad. Sch. of Eng., Osaka Univ., Japan, <sup>2</sup>Dept. of Biotech., Sch. of Life Sci. and Tech., Institut Teknologi Bandung, Indonesia, <sup>3</sup>Dept. of Food Sci. and Tech., Fac. of Agric. Tech. and Eng., Bogor Agric. Univ., Indonesia14:55 **Closing Remarks****Symposium 11****13:30-15:00 Room E****Skin Health****Organizers:** Jolon M. Dyer (Univ. of Canterbury, New Zealand)

Daiki Murase (Kao Co., Japan)

Kentaro Naito (DHC, Japan)

**Chairs:** Daiki Murase (Kao Co., Japan)

Kentaro Naito (DHC, Japan)

**SY11-1 Stem cells in solar lentigines (SLs)**

13:30

Takaaki Yamada

Res. Laboratories, Nippon Menard Cosmetic Co., Ltd, Japan

**SY11-2 Tracking modification in fibrous proteins with redox proteomics: application to the protection & repair of hair and skin**

13:48

Jolon M. Dyer<sup>1,2,3,4</sup>

<sup>1</sup>Food & Bio-Based Products, AgResearch, New Zealand, <sup>2</sup>Riddet Inst. based at Massey Univ., New Zealand, <sup>3</sup>Biomolecular Interaction Centre, Univ. of Canterbury, New Zealand, <sup>4</sup>Wine, Food and Mol. Biosci., Lincoln Univ., New Zealand

**SY11-3 Skin color control by targeting pigment transport**

14:06

Kentaro Naito

Fundamental Res. Lab., DHC Co., Japan

**SY11-4 Role of autophagy in skin homeostasis**

14:24

Daiki Murase

Biological Sci. Res., Kao Co., Japan

**SY11-5 Peptide extracts from Dadih, the Indonesian fermented buffalo milk, protect against skin photoaging *in vivo***

14:42

Yanti<sup>1</sup>, Jocelin Muliawan<sup>2</sup>, Bibiana Widiyati Lay<sup>2</sup>

<sup>1</sup>Dept. of Food Technol., Atma Jaya Catholic Univ. of Indonesia, Indonesia, <sup>2</sup>Dept. of Biol., Atma Jaya Catholic Univ. of Indonesia, Indonesia

## YIA Final Competition 1

13:30-15:00 Room F

**Chairs:** Yoko Yamashita (Kobe Univ., Japan)

Noriyuki Miyoshi (Univ. of Shizuoka, Japan)

Kyuichi Kawabata (Konan Women's Univ., Japan)

Michiko T. Yasuda (Sugiyama Jogakuen Univ., Japan)

13:30 **Opening Remarks**

**YIA-01 Metabolomics-based research for the classification of tempe from different regions and production processes in Indonesia (SY10-4)**

13:35

Adinda D. Kadar<sup>1</sup>, Pingkan Aditiawati<sup>2</sup>, Made Astawan<sup>3</sup>, Sastia P. Putri<sup>1</sup>, Eiichiro Fukusaki<sup>1</sup>

<sup>1</sup>Dept. of Biotech., Grad. Sch. of Eng., Osaka Univ., Japan, <sup>2</sup>Dept. of Biotech., Sch. of Life Sci. and Tech., Institut Teknologi Bandung, Indonesia, <sup>3</sup>Dept. of Food Sci. and Tech., Fac. of Agric. Tech. and Eng., Bogor Agric. Univ., Indonesia

**YIA-02 Effects of a carbohydrate-restricted diet on aging in senescence-accelerated prone mice (SY54-6)**

13:40

Chaoqi He, Qiming Wu, Tsuyoshi Tsuduki

Tohoku Univ., Japan

**YIA-03 Lean male and female mice respond differently to increasing dietary intake (SY38-6) of high amylose wheat**

13:45 See Meng Lim<sup>1,3,4</sup>, Amanda Page<sup>2,3</sup>, Hui Li<sup>2,3</sup>, John Carragher<sup>1</sup>, Iain Searle<sup>1</sup>, Sarah Robertson<sup>2</sup>, Beverly Muhlhauser<sup>1,3,5</sup>

<sup>1</sup>Fac. of Sci., The Univ. of Adelaide, Australia, <sup>2</sup>Fac. of Health and Med. Sci., The Univ. of Adelaide, Australia, <sup>3</sup>South Australian Health and Med. Res. Inst., Australia, <sup>4</sup>Cent. for Community Health, Fac. of Health Sci., Universiti Kebangsaan Malaysia, Malaysia, <sup>5</sup>Commonwealth Sci. and Ind. Res. Organisation, Australia

**YIA-04  $\gamma$ -Aminobutyric acid induces biosynthesis of a novel imidazole peptide in (PB0105) skeletal muscle**

13:50 Kanako Sato<sup>1</sup>, Takeshi Arima<sup>2</sup>, Takumi Komaru<sup>3</sup>, Noriyuki Yanaka<sup>1</sup>, Mikako Sato<sup>4</sup>, Yasuyuki Oishi<sup>4</sup>, Thanachaporn Kumrungsee<sup>1</sup>

<sup>1</sup>Grad. Sch. of Integ. Sci. for Life, Hiroshima Univ., Japan, <sup>2</sup>Grad. Sch. of Biosphere Sci., Hiroshima Univ., Japan, <sup>3</sup>Sch. of Appl. Biosci., Hiroshima Univ., Japan, <sup>4</sup>R&D Cent., NH Foods Ltd., Japan

**YIA-05 The mechanism of FGF21-induced suppression of liver lipid accumulation (PB0104) during protein malnutrition**

13:55 Hiroki Kosaka<sup>1</sup>, Yori Ozaki-Masuzawa<sup>2</sup>, Rino Abiru<sup>2</sup>, Keigo Kawate<sup>2</sup>, Yuki Kohno<sup>2</sup>, Atsushi Miura<sup>1,2</sup>, Morichika Konishi<sup>3</sup>, Nobuyuki Itoh<sup>4</sup>, Asako Takenaka<sup>5</sup>, Takashi Hosono<sup>1,2</sup>, Taiichiro Seki<sup>1,2</sup>

<sup>1</sup>Dept. of Appl. Life Sci., Grad. Sch. of Bioresour. Sci., Nihon Univ., Japan, <sup>2</sup>Dept. of Chem. and Life Sci., Coll. of Bioresour. Sci., Nihon Univ., Japan, <sup>3</sup>Lab. of Microbial Chem., Kobe Pharm. Univ., Japan, <sup>4</sup>Dept. of Genetic Biochem., Kyoto Univ. Grad. Sch. of Pharm. Sci., Japan, <sup>5</sup>Dept. Agric. Chem., Sch. of Agric., Meiji Univ., Japan

**YIA-06 Precise analysis of plant sterols in human blood and search for factors (PB0401) related to its concentration**

14:00 Eriko Nakatsukasa, Tsuyoshi Tsuduki  
Grad. Sch. of Agric., Tohoku Univ., Japan

**YIA-07 Dipeptides can transport across the blood-brain barrier in mouse brain (PB0612) Hayato Kiyohara<sup>1</sup>, Mitsuru Tanaka<sup>1</sup>, Shinya Dohgu<sup>2</sup>, Genki Komabayashi<sup>1</sup>,**

14:05 Fuyuko Takata<sup>2</sup>, Yasufumi Kataoka<sup>2</sup>, Takashi Nirasawa<sup>3</sup>, Toshiro Matsui<sup>1</sup>

<sup>1</sup>Div. of Biores. and Bioenviron. Sci., Grad. Sch. of Agric. Sci., Kyushu Univ., Japan, <sup>2</sup>Div. of Pharm. Care and Health Sci., Fukuoka Univ., Japan, <sup>3</sup>Brucker Japan K.K., Japan

**YIA-08 Absorption of Cblin oligopeptide across Caco-2 cell monolayers and rat (SY18-5) intestinal membrane**

14:10 Weilin Shen<sup>1</sup>, Mitsuru Tanaka<sup>1</sup>, Reiko Nakao<sup>2</sup>, Takeshi Nikawa<sup>2</sup>, Toshiro Matsui<sup>1</sup>

<sup>1</sup>Dept. of Biosci. Biotechnol., Grad. Sch. of Agric., Kyushu Univ., Japan, <sup>2</sup>Dept. of Nutr. Physiol., Inst. of Health Biosci., Tokushima Univ., Japan

**YIA-09 Green tea polyphenol EGCG enhances anticoagulation factor TFPI (PB0721) expression by activating 67LR signaling**

14:15 Ren Yoshitomi, Hirokatsu Kanzaki, Takuya Takakura, Shigeyuki Totoki, Motofumi Kumazoe, Yoshinori Fujimura, Hirofumi Tachibana

Div. of Appl. Biol. Chem., Grad. Sch. of Bioresour. and Bioenviron. Sci., Kyushu Univ., Japan

**YIA-10 Theasinensin A promotes paracellular transport of hesperidin in Caco-2 cell (PC0402)** Chizumi Abe<sup>1</sup>, Naoto Ohno<sup>1</sup>, Shuwei Huang<sup>1</sup>, Alexia Nectoux<sup>1</sup>, Haruo Yamamura<sup>2</sup>,

14:20 Toshiro Matsui<sup>1</sup>

<sup>1</sup>Fac. of Agric., Grad. Sch. of Kyushu Univ., Japan, <sup>2</sup>Charle Co., Japan

**YIA-11 The host immunoresponsiveness influences probiotic functions of inulin (PB0810)** Yu Arima<sup>1</sup>, Kenjiro Shiozawa<sup>2</sup>, Masayuki Noguchi<sup>2</sup>, Yori Ozaki-Masuzawa<sup>2</sup>,

14:25 Takashi Hosono<sup>1,2</sup>, Taiichiro Seki<sup>1,2</sup>

<sup>1</sup>Dept. of Appl. Life Sci., Grad. Sch. of Bioresour. Sci., Nihon Univ., Japan, <sup>2</sup>Dept. of Chem. and Life Sci., Coll. of Bioresour. Sci., Nihon Univ., Japan

**YIA-12 Analysis of mechanism underlying gastric mucosal cell death induced by (PB0908) sodium sulfite**

14:30 Moeri Oshimo, Kenji Kai, Mitsugu Akagawa

Grad. Sch. of Life & Environ. Sci., Osaka Pref. Univ., Japan

**YIA-13 Effects of 6-(methylsulfinyl)hexyl isothiocyanate on induction of aldehyde (PB0907) dehydrogenase in hepatocytes**

14:35 Tomoya Kitakaze, Sihao Yuan, Hitoshi Ashida

Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan

**YIA-14 The exploration of Vitamin K binding protein using the novel fluorescent (SY32-1) probes**

14:40 Sho Sano<sup>1</sup>, Yuki Ito<sup>1</sup>, Maya Kamao<sup>2</sup>, Yoshitomo Suhara<sup>1</sup>, Yoshihisa Hirota<sup>1</sup>

<sup>1</sup>Syst. Eng. and Sci., Grad. Sch. of Eng. and Sci., Shibaura Inst. of Tech., Japan, <sup>2</sup>Ext. Cent., Kobe Pharm. Univ., Japan

**YIA-15  $\alpha$ -Monoglucosyl hesperidin but not hesperidin induces brown-like (PB1105) adipocyte formation and suppresses white adipose tissue accumulation in mice**

14:45

Takuma Hyodo<sup>1</sup>, Sho Nishikawa<sup>1</sup>, Tsubasa Nagao<sup>1</sup>, Akihito Nakanishi<sup>2</sup>, Mahamadou Tandia<sup>2</sup>, Takanori Tsuda<sup>1</sup>

<sup>1</sup>Coll. of Biosci. and Biotechnol., Chubu Univ., Japan, <sup>2</sup>Toyo Sugar Refining Co., Ltd., Japan

**YIA-16 Anti-inflammatory effect of siphonaxanthin and its underlying molecular (SY21-5) mechanisms**

14:50 Yuki Manabe<sup>1</sup>, Natsuki Hashimoto<sup>1</sup>, Toshiro Okazaki<sup>2</sup>, Takashi Hirata<sup>1,3</sup>, Tatsuya Sugawara<sup>1</sup>

<sup>1</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>Res. Inst. of Bioresour. Biotech., Ishikawa Pref. Univ., Japan, <sup>3</sup>Shijonawate Gakuen Univ., Japan

**Symposium 12****15:30-17:30 Room A****Cancer Chemoprevention**

**Organizers:** Kayoko Shimoi (Univ. of Shizuoka, Japan)  
Yoshimasa Nakamura (Okayama Univ., Japan)

**Chairs:** Kayoko Shimoi (Univ. of Shizuoka, Japan)  
Young-Joon Surh (Seoul National Univ., Korea)

15:30 **Overview****SY12-1 Function of carotenoid  $\beta$ -cryptoxanthin: Implications for cancer prevention**15:40 Xiang-Dong Wang*Jean-Mayer United States Dept. of Agric. Human Nutr. Res. Cent. on Aging at Tufts Univ., USA***SY12-2 Curcumin exerts anti-inflammatory effects through upregulation of 15-hydroxyprostaglandin dehydrogenase against *Helicobacter pylori* infection**16:10 Hye-Kyung Na*Dept. of Food Sci. and Biotechnol., Coll. of Knowledge-based Service Eng., Sungshin Women's Univ., Korea***SY12-3 Inhibition of drug resistance mechanisms ameliorates the benzyl isothiocyanate-induced antiproliferation in human colorectal cancer cells**16:40 Yoshimasa Nakamura*Grad. Sch. Environ. Life Sci., Okayama Univ., Japan***SY12-4 Effect of quercetin on regulating cell death and chemosensitivity in human pancreatic cancer cells**17:00 Gow-Chin Yen, Chieh-Yu Lan, Sheng-Yi Chen, Chia-Wen Kuo*Dept. of Food Sci. Biotechnol., Natl. Chung Hsing Univ., Taiwan***SY12-5 The Ashitaba (*Angelica keiskei*) chalcones 4-hydroxyderricin and xanthoangelol suppress melanomagenesis by targeting BRAF and PI3-K**17:15 Tianshun Zhang<sup>1</sup>, Qiushi Wang<sup>1</sup>, Hitoshi Ashida<sup>2</sup>, Zigang Dong<sup>1</sup>*<sup>1</sup>The Hormel Inst., Univ. of Minnesota, USA, <sup>2</sup>Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan*

**Symposium 13****15:30-17:30 Room B****Polyphenols : Molecular Mechanisms****Organizers:** Toshihiko Shoji (NARO, Japan)

Toshiyuki Nakamura (Okayama Univ., Japan)

**Chairs:** Francisco A. Tomás-Barberán (CEBAS-CSIC Murcia, Spain)

Yves Desjardins (Laval Univ., Canada)

**SY13-1 Polyphenols - gut microbiota interactions; understanding the role of polyphenols in human health**

15:30

Francisco A. Tomás-Barberán, Rocío García-Villalba, Antonio González-Sarrías, Victoria Selma, Juan C. Espín*Food and Health Lab. Res. Group on Quality, Safety and Bioactivity of Plant Foods, Dept. Food Sci., CEBAS-CSIC Murcia, Spain***SY13-2 Polyphenols affect the genetic and morphologic response of *Akkermansia muciniphila* a bacteria playing a central role in the etiology of cardiometabolic disorders**

16:05

Yves Desjardins, María-Carolina Rodríguez Daza, Denis Roy*Inst. of Nutr. and Functional Foods (INAF), Laval Univ., Canada***SY13-3 Structure-activity relationship of procyanidins on advanced glycation end products formation and corresponding mechanisms**

16:40

Qian Wu, Chao Wang*Sch. of Food and Biol. Eng., Hubei Univ. of Technol., China***SY13-4 Visualization of absorption and metabolism of polyphenols in rat intestine by nifedipine aided-MALDI-MS imaging**

16:55

Mitsuru Tanaka, Tae Hun Ham, Huu-Nghi Nguyen, Toshiro Matsui*Dept. of Biosci. Biotechnol., Fac. of Agric., Grad. Sch. of Kyushu Univ., Japan***SY13-5 Flavan 3-ols evoke locus coeruleus- noradrenaline neuron firing**

17:10

Yasuyuki Fujii<sup>1</sup>, Noriko Nakao<sup>1</sup>, Keiko Abe<sup>2</sup>, Shu Taira<sup>3</sup>, Naomi Osakabe<sup>1</sup><sup>1</sup>Dept. of Biosci. and Eng., Shibaura Inst. of Technol., Japan, <sup>2</sup>Dept. of Appl. Biol. Chem., Grad. Sch. of Agric. and Life Sci., Tokyo Univ., Japan, <sup>3</sup>The Fac. of Food and Agric. Sci., Fukushima Univ., Japan**17:25 Closing Remarks**



**Symposium 14****15:30-17:30 Room C****Sulfur Compounds: From Biosynthetic Mechanisms to Its Function at Molecular Basis**

**Organizers & Chairs:** Taiichiro Seki (Nihon Univ., Japan)  
Lee Yan Sheen (National Taiwan Univ., Taiwan)

15:30 **Overview****SY14-1 Investigation of the biosynthesis of S-alk(en)ylcysteine sulfoxides in the genus *Allium***

15:40

Naoko Yoshimoto*Grad. Sch. Pharm. Sci., Chiba Univ., Japan***SY14-2 Volatile organosulfur compounds derived from garlic inhibit platelet aggregation through the modification of sulfhydryl groups**

16:10

Takashi Hosono*Dept. of Chem. & Life Sci., Coll. of Bioresour. Sci., Nihon Univ., Japan***SY14-3 Long-term treatment with garlic essential oil reverses unpredictable chronic mild stress-induced depressive-like behavior via monoaminergic neurotransmission in rat brain**

16:40

Yun Ju Huang<sup>1</sup>, Lee Yan Sheen<sup>1,2,3</sup>*<sup>1</sup>Inst. of Food Sci. and Technol., Natl. Taiwan Univ., Taiwan, <sup>2</sup>Cent. for Food and Biomol., Natl. Taiwan Univ., Taiwan, <sup>3</sup>Natl. Cent. for Food Safety Education and Res., Natl. Taiwan Univ., Taiwan***SY14-4 Taurine chloramine ameliorates experimentally induced colon and skin inflammation**

17:10

Seong Hoon Kim<sup>1</sup>, So Eui Lee<sup>1,2</sup>, Yanymee Nimesia Guillen Quispe<sup>1,2</sup>, Do-Hee Kim<sup>1,2</sup>, Young-Joon Surh<sup>1,2</sup>*<sup>1</sup>Tumor Microenvironment Global Core Res. Cent., Coll. of Pharm., Seoul Natl. Univ., Korea, <sup>2</sup>Dept. of Mol. Med. and Biopharm. Sci., Seoul Natl. Univ., Korea***Symposium 15****15:30-17:30 Room D**

Co-organized by The Society of Tea Science of Japan

**Tea**

**Organizers:** Chung S. Yang (Rutgers Univ., USA)  
Kazutoshi Sayama (Shizuoka Univ., Japan)

**Chairs:** Ichiro Tokimitsu (Univ. Human arts Sciences, Japan)  
Kazutoshi Sayama (Shizuoka Univ., Japan)

**SY15-1 Studies on the beneficial health effects of tea**

15:30

Chung S. Yang*Dept. of Chem. Biol., Rutgers, The State Univ. of New Jersey, USA*

**SY15-2 Study on suppression of fat accumulation and food intake by green tea and its component.**

15:55

Kazutoshi Sayama*Coll. of Agric., Academic Inst., Shizuoka Univ., Japan***SY15-3 Green tea extracts enhance energy expenditure to exert their beneficial effects in humans**

16:20

Shinichi Meguro*Biological Sci. Res., Kao Co., Japan***SY15-4 Epigallocatechin gallate (EGCg) improved diabetic nephropathy through activation of diacylglycerol kinase alpha**

16:45

Yasuhito Shirai<sup>1</sup>, Daiki Hayashi<sup>2</sup><sup>1</sup>*Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan,* <sup>2</sup>*Dept. of Chem. and Biochem., UCSD., USA***SY15-5 Gut microbiota facilitate tea polyphenols to trap deleterious reactive endogenous metabolites**

17:10

Shengmin Sang<sup>1</sup>, Shuwei Zhang<sup>1</sup>, Christina Ohland<sup>2</sup>, Christian Jobin<sup>2</sup><sup>1</sup>*Lab. for Functional Foods and Human Health, North Carolina A&T State Univ., USA,* <sup>2</sup>*Dept. of Infectious Dis. and Immunol., Univ. of Florida, USA***Symposium 16****15:30-17:30 Room E****Metabolic Syndrome and Diabetes****Organizers:** Hiroshi Yoshida (The Jikei Univ. Sch. of Med., Japan)

Nobuyuki Takahashi (Tokyo Univ. of Agric., Japan)

Rina Yu (Univ. of Ulsan, Korea)

**Chairs:** Hiroshi Yoshida (The Jikei Univ. Sch. of Med., Japan)

Nobuyuki Takahashi (Tokyo Univ. of Agric., Japan)

**SY16-1 Mitigation of obesity-related pathologies by dietary cocoa supplementation**

15:30

Joshua D. Lambert<sup>1,2</sup><sup>1</sup>*Dept. of Food Sci., The Pennsylvania State Univ., USA* <sup>2</sup>*Cent. for Mol. Toxicol. and Carcinogenesis, The Pennsylvania State Univ., USA***SY16-2 Extracellular matrix protein, endotrophin contributes to ER stress-linked adipocyte dysfunction in obesity**

15:50

Jiyoung Park*Dept. of Biol. Sci., UNIST, Korea***SY16-3 Adiponectin in metabolic syndrome and related disorders**

16:10

Shinji Kihara*Dept. of Biomed. Informatics, Grad. Sch. of Med, Osaka Univ., Japan*

**SY16-4 Brown rice-specific  $\gamma$ -oryzanol as a promising prophylactic avenue to protect against diabetes mellitus and obesity disease**

16:30

Hiroaki Masuzaki<sup>1</sup>, Shiki Okamoto<sup>1</sup>, Satoru Yamazaki<sup>1</sup>, Michio Shimabukuro<sup>2</sup>

<sup>1</sup>Dept. of Med., Grad. Sch. of Med., Univ. of the Ryukyus, Japan, <sup>2</sup>Dept. of Diabetes, Endocrinol. and Metab., Sch. of Med., Fukushima Med. Univ., Japan

**SY16-5 Ectopic fat depots and cardiometabolic disease: how food factors are linked?**

16:50

Michio Shimabukuro

Dept. of Diabetes, Endocrinol. & Metab., Fukushima Med. Univ., Japan

**17:10 Closing Remarks**

**YIA Final Competition 2**

**15:30-17:30 Room F**

**Chairs:** Rie Mukai (Tokushima Univ., Japan)

Noriyuki Miyoshi (Univ. of Shizuoka, Japan)

Kyuichi Kawabata (Konan Women's Univ., Japan)

Michiko T. Yasuda (Sugiyama Jogakuen Univ., Japan)

**YIA-17 Intestinal absorption of visualized anthocyanins in rats by matrix assisted (PC0404) laser desorption/ionization mass spectrometry imaging technique**

15:30

Taehun Ham<sup>1</sup>, Huu-Nghi Nguyen<sup>1</sup>, Mitsuru Tanaka<sup>1</sup>, Ayaka Tsutsumi<sup>2</sup>, Qing Qiang Hu<sup>2</sup>, Koichi Aizawa<sup>2</sup>, Toshiro Matsui<sup>1</sup>

<sup>1</sup>Div. of Biores. Bioenviro. Sci., Grad. Sch. of Agric. Sci., Kyushu Univ., Japan, <sup>2</sup>Res. and Dev., Kagome Inc., Japan

**YIA-18 Absorption and metabolic behavior of hesperidin (rutinosylated hesperetin) (SY04-5) after single oral administration to Sprague-Dawley rat**

15:35

Alexia M. Nectoux<sup>1</sup>, Chizumi Abe<sup>1</sup>, Shu-Wei Huang<sup>1</sup>, Naoto Ohno<sup>1</sup>, Haruo Yamamura<sup>2</sup>, Toshiro Matsui<sup>1</sup>

<sup>1</sup>Div. of Biores. and Bioenviron. Sci., Grad. Sch. of Agric., Kyushu Univ., Japan, <sup>2</sup>Charle Co., Japan

**YIA-19 Enhanced absorption of prenylated isoflavones in rat circulating (PC0405) bloodstream**

15:40

Ye Zhang<sup>1</sup>, Kazuhiro Takao<sup>1</sup>, Kuni Sasaki<sup>2</sup>, Kouji Ochiai<sup>2</sup>, Toshiro Matsui<sup>1</sup>

<sup>1</sup>Div. Biores. Bioenvir. Sci., Grad. Sch. of Agric. Kyushu Univ., Japan, <sup>2</sup>Daizu Energy Co. Ltd., Japan

**YIA-20 Pharmacokinetics and metabolism of components in Brazilian green (PC0406) propolis after oral administration in humans**

15:45

Masayuki Yamaga<sup>1,2</sup>, Hiroko Tani<sup>2</sup>, Manamu Kitami<sup>3</sup>, Shin-ichi Ikushiro<sup>3</sup>, Kaeko Murota<sup>4</sup>

<sup>1</sup>Appl. Bioresour Chem., Bioresour and Life Sci., The United Grad. Sch. of Agric. Sci., Tottori Univ., Japan, <sup>2</sup>Inst. for Bee Products and Health Sci., Yamada Bee Co. Inc., Japan, <sup>3</sup>Dep. Biotech., Fac. Engineer, Toyama Pref. Univ., Japan, <sup>4</sup>Dept. Life Sci., Fac. Life Environ. Life Sci., Shimane Univ., Japan

- YIA-21  $\beta$ -Lactolin, a novel whey-derived peptide, improves memory retrieval in a (PC0610) clinical trial and prevents Alzheimer's disease in preclinical studies**  
 15:50 Yasuhisa Ano<sup>1,2</sup>, Rena Ohya<sup>1</sup>, Masahiro Kita<sup>1</sup>, Satoshi Umeda<sup>3</sup>, Hiroyuki Nakayama<sup>2</sup>  
<sup>1</sup>Res. Lab. for Health Sci and Food Tech., Kirin Holdings, Japan, <sup>2</sup>Grad. Sch. of Agric. and Life Sci., the Univ. of Tokyo, Japan, <sup>3</sup>Dept. Psychol., Keio Univ., Japan
- YIA-22 Cognitive function improvement with astaxanthin and tocotrienols intake (PB0303) –A randomized, double-blind, placebo-controlled study–**  
 15:55 Yuki Kizawa<sup>1</sup>, Takahiro Sekikawa<sup>1</sup>, Yanmei Li<sup>2</sup>, Tsuyoshi Takara<sup>3</sup>  
<sup>1</sup>BGG Japan Co., Ltd., Japan, <sup>2</sup>Beijing Gingko-Group Biol. Technol. Co., Ltd., China, <sup>3</sup>Med. Co. Seishinkai, Japan
- YIA-23 Inhibitory mechanism of polyphenols for the disruption of circadian clock (PC0902) via AhR**  
 16:00 Takuya Nomura<sup>1</sup>, Tomoya Kitakaze<sup>2</sup>, Yoko Yamashita<sup>2</sup>, Hitoshi Ashida<sup>2</sup>  
<sup>1</sup>Fac. of Agric., Kobe Univ., Japan, <sup>2</sup>Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan
- YIA-24 Altered metabolites related to sarcopenia in the skeletal muscles of aged (SY27-5) mice**  
 16:05 Ran Uchitomi<sup>1</sup>, Yukino Hatazawa<sup>1</sup>, Nanami Senoo<sup>2</sup>, Kiyoshi Yoshioka<sup>3</sup>, Mariko Fujita<sup>1</sup>, Takahiko Shimizu<sup>4</sup>, Shinji Miura<sup>2</sup>, Yusuke Ono<sup>3</sup>, Yasutomi Kamei<sup>1</sup>  
<sup>1</sup>Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ., Japan, <sup>2</sup>Grad. Sch. of Nutr. and Environ. Sci., Univ. of Shizuoka, Japan, <sup>3</sup>Inst. of Mol. Embryol. and Genet., Kumamoto Univ., Japan, <sup>4</sup>Dept. of Advanced Aging Med., Chiba Univ. Grad. Sch. of Med., Japan
- YIA-25 Identification of atrophy-related FOXO1-target genes in skeletal muscle of (PC1012) mice**  
 16:10 Mamoru Oyabu, Kaho Takigawa, Yasutomi Kamei  
 Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ., Japan
- YIA-26 Screening of compounds that suppress the transcriptional activity of FOXO1 (PC1007)** Rintaro Matsuda, Takumi Onishi, Yuma Hirose, Yukino Hatazawa, Yasutomi Kamei  
 16:15 Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ., Japan
- YIA-27 Genistein and daidzein promotes PGC-1 $\beta$ -mediated energy expenditure (PC1010) gene expression in muscle cells**  
 16:20 Shiho Nakai<sup>1</sup>, Ran Uchitomi<sup>1</sup>, Rintaro Matsuda<sup>1</sup>, Takumi Onishi<sup>1</sup>, Shinji Miura<sup>2</sup>, Yukino Hatazawa<sup>1</sup>, Yasutomi Kamei<sup>1</sup>  
<sup>1</sup>Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ., Japan, <sup>2</sup>Grad. Sch. of Nutr. and Environ. Sci., Univ. of Shizuoka, Japan
- YIA-28 Oleamide rescues skeletal muscle atrophy of mice housed in small cages (PC1002)** Yasuyuki Kobayashi<sup>1</sup>, Natsumi Watanabe<sup>1</sup>, Tomoya Kitakaze<sup>2</sup>, Keiichiro Sugimoto<sup>3,4</sup>, Kenji Kai<sup>1</sup>, Naoki Harada<sup>1</sup>, Ryoichi Yamaji<sup>1</sup>  
 16:25 <sup>1</sup>Div. Appl. Life Sci., Grad. Sch. Life Environ., Osaka Pref. Univ., Japan, <sup>2</sup>Grad. Sch. Agri. Sci., Kobe Univ. Japan, <sup>3</sup>R&D Cent., Nagaoka Co., Ltd., Japan, <sup>4</sup>Cent. R&D Bioresour, Osaka Pref. Univ., Japan

- YIA-29 A novel antiobesity effect of garlic compound mediated through miRNA (SY37-5)**  
 16:30 Takahiro Watanabe<sup>1</sup>, Ayana Ikeda<sup>1</sup>, Kiki Seo<sup>1</sup>, Atsushi Miura<sup>1,2</sup>, Yori Ozaki-Masuzawa<sup>2</sup>, Takashi Hosono<sup>1,2</sup>, Taiichiro Seki<sup>1,2</sup>  
<sup>1</sup>Dept. of Appl. Life Sci., Grad. Sch. of Bioresour. Sci., Nihon Univ., Japan, <sup>2</sup>Dept. of Chem. And Life Sci., Coll. of Bioresour. Sci., Nihon Univ., Japan
- YIA-30 Suppressive effects of luteolin on serotonin production in RBL-2H3 cells (SY17-6)**  
 16:35 Naoko Suga<sup>1</sup>, Hideyuki Arimitsu<sup>1,2</sup>, Akira Murakami<sup>1,2</sup>, Yoji Kato<sup>1,2</sup>  
<sup>1</sup>Grad. Sch. of Human Sci. & Environ., Univ. of Hyogo, Japan, <sup>2</sup>Res. Inst. Food & Nutri. Sci., Univ. of Hyogo, Japan
- YIA-31 Dietary fermentable fibers increase intestinal heat shock protein70 through (PC1207) short chain fatty acids production**  
 16:40 Adesina Precious Adedayo<sup>1</sup>, Takuya Suzuki<sup>1,2</sup>  
<sup>1</sup>Dept. of Biofunctional Sci. and Technol., Grad. Sch. of Biosphere Sci., Hiroshima Univ., Japan, <sup>2</sup>Program of Food AgriLife Sci., Grad. Sch. of Integrated Sci. for Life, Hiroshima Univ., Japan
- YIA-32 Study on the relationship between fatty acid metabolism and thermogenic (PC1305) function of white adipocytes**  
 16:45 Mari Iwase<sup>1</sup>, Soshi Tokiwa<sup>1</sup>, Shigeto Seno<sup>2</sup>, Takako Mukai<sup>3</sup>, Haruya Takahashi<sup>1</sup>, Wataru Nomura<sup>1</sup>, Hwei-Fen Jheng<sup>1</sup>, Tatsuya Kusudo<sup>3</sup>, Naoki Osato<sup>2</sup>, Hideo Matsuda<sup>2</sup>, Kazuo Inoue<sup>1</sup>, Teruo Kawada<sup>1,4</sup>, Tsuyoshi Goto<sup>1,4</sup>  
<sup>1</sup>Div. of Food Sci. and Biotechnol. Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>Dept. of Bioinformatic Eng., Grad. Sch. of Information Sci. and Technol., Osaka Univ., Japan, <sup>3</sup>Fac. of Human Sci., Tezukayama Gakuin Univ., Japan, <sup>4</sup>Res. Unit for Physiol. Chem., Cent. for the Prom. of Interdisciplinary Educ. and Res., Kyoto Univ., Japan
- YIA-33 Artepillin C induces thermogenesis in inguinal white adipose tissues of mice (PC1323) in association with a creatine metabolism-related thermogenic pathway**  
 16:50 Sho Nishikawa<sup>1</sup>, Takuma Hyodo<sup>1</sup>, Hiroki Aoyama<sup>1</sup>, Ryo Miyata<sup>2</sup>, Shigenori Kumazawa<sup>2</sup>, Takanori Tsuda<sup>1</sup>  
<sup>1</sup>Coll. of Biosci. and Biotech., Chubu Univ., Japan, <sup>2</sup>Dept. of Food and Nutr. Sci., Univ. of Shizuoka, Japan
- YIA-34 Pyroglutamyl peptides with anti-obesity, which are distributed in Japanese (SY22-5) fermented foods, regulate ERK phosphorylation through GPR109A and GPR81**  
 16:55 Saki Shirako<sup>1</sup>, Satoshi Miyauchi<sup>1</sup>, Vadivel Ganapathy<sup>2</sup>, Kenji Sato<sup>1</sup>  
<sup>1</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>Dept. of Cell Biol. & Biochem., Texas Tech Univ., USA
- YIA-35 Aged garlic extract induces aldehyde dehydrogenase via Nrf2/ARE pathway (PC1902)**  
 17:00 Masako Inoue, Sihao Yuan, Tomoya Kitakaze, Hitoshi Ashida  
 Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan
- YIA-36 Photodynamic therapy induces differential changes in human breast (PD0106) epithelial cells lipidome**  
 17:05 Alex Inague, Ancély Ferreira dos Santos, Marcos Yukio Yoshinaga, Leticia Labriola, Sayuri Miyamoto  
 Dept. of Biochem., Chem. Inst., Univ. of São Paulo, Brazil

**YIA-37 Analysis of fecal gaseous metabolites in NASH-hepatocellular carcinoma (PD0301) model mice**

17:10 Mai Kato<sup>1</sup>, Tsutomu Hashidume<sup>1</sup>, Yutaka Shoji<sup>1</sup>, Kumiko Shoji<sup>2</sup>, Miki Igarashi<sup>3</sup>, Sumio Hayakawa<sup>4</sup>, Yuko Yoshikawa<sup>1,5</sup>, Noriyuki Miyoshi<sup>1</sup>  
<sup>1</sup>Grad. Sch. of Integrated Pharm. and Nutr. Sci., Univ. of Shizuoka, Japan, <sup>2</sup>Kagawa Education Inst. of Nutr., Japan, <sup>3</sup>Tokyo Univ. of Agric. and Technol., Japan, <sup>4</sup>Nippon Med. Sch., Japan, <sup>5</sup>Nippon Vet. and Life Sci. Univ., Japan

**YIA-38 Vitamin D deficiency and its associated factors in healthy Malaysian pregnant women (SY32-2)**

17:15 Siew Siew Lee<sup>1</sup>, Su Peng Loh<sup>1</sup>, Raman Subramaniam<sup>2</sup>, Maiza Tusimin<sup>3</sup>, King Hwa Ling<sup>4,5</sup>, Kartini Farah Rahim<sup>6</sup>  
<sup>1</sup>Dept. of Nutr. & Dietetics, Fac. of Med. & Health Sci., Universiti Putra Malaysia, Malaysia, <sup>2</sup>Fetal Med. & Gynaecology Centre, Malaysia, <sup>3</sup>Dept. of Obstetrics & Gynaecology, Fac. of Med. & Health Sci., Universiti Putra Malaysia, Malaysia, <sup>4</sup>Dept. of Biomedical Sci., Fac. of Med. & Health Sci., Universiti Putra Malaysia, Malaysia, <sup>5</sup>Dept. of Genetics, Harvard Medical Sch., USA, <sup>6</sup>Avisena Specialist Hosp., Malaysia

**YIA-39 The prebiotic factors of fresh and chip lesser yam (*Dioscorea esculenta*) by (PD0726) simulation model of human colonic microbiota in batch culture fermentation**

17:20 Adrian Hilman<sup>1</sup>, Eni Harmayani<sup>2</sup>, Muhammad Nur Cahyanto<sup>2</sup>, Santad Wichienchot<sup>3</sup>  
<sup>1</sup>Dept. of Food Sci. and Tech., Fac. of Agric, Univ. Sumatera Utara, Indonesia, <sup>2</sup>Dept. of Food and Agric. Prod. Tech., Fac. of Agric. Tech., Univ. Gadjah Mada, Indonesia, <sup>3</sup>Interdisc. Grad. Sch. of Nutr. and Funct. Food, Prince of Songkla Univ., Thailand

**YIA-40 Caffeine-induced acute P1 purinergic receptor activation in lacrimal glands (PD0712) leads to upregulation of tear secretion in a mouse model**

17:25 Meng-Tien Hsieh<sup>1</sup>, Yu-Wen Kao<sup>1</sup>, Tsung-Han Lu<sup>1</sup>, Chia-Yun Hsu<sup>1</sup>, Ya-Jing Liu<sup>1</sup>, Han-Hsin Chang<sup>2</sup>, David Pei-Cheng Lin<sup>1</sup>  
<sup>1</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan

## December 3

### Plenary Lectures 3 & 4

8:30-9:30 Room A

Chair: Kazuo Miyashita (Hokkaido Univ., Japan)

**PL3** *Helicobacter pylori* infection and food bioactives

8:30

Chin-Kun Wang

*Chung Shan Med. Univ., Taiwan*

Chair: Hitomi Kumagai (Nihon Univ., Japan)

**PL4** Impact of calcium-sensing receptor toward to gut health and metabolic disorders: Conception and bioactive food factors

9:00

Yoshinori Mine

*Dept. of Food Sci., Univ. of Guelph, Canada*

### Symposium 17

10:00-12:00 Room A

#### Role of Foods in Gastrointestinal Health & Diseases

**Organizer:** Yuji Naito (Kyoto Pref. Univ. Med., Japan)

**Chairs:** Yuji Naito (Kyoto Pref. Univ. Med., Japan)

Sin-Hyeog Im (Pohang Univ. of Sci. and Technol. (POSTECH), Korea)

**SY17-1** Rationally selected probiotics as immunomodulatory pharmabiotics

10:00

Sin-Hyeog Im<sup>1,2</sup>

*<sup>1</sup>Div. of Integrative Biosci. and Biotechnol., Pohang Univ. of Sci. and Technol. (POSTECH), <sup>2</sup>Dept. of Life Sci., POSTECH, Korea*

**SY17-2** Diets and commensal bacteria create gut environment for the immunological health and diseases

10:25

Jun Kunisawa

*Lab. of Vaccine Materials, Cent. for Vaccine and Adjuvant Res. and Lab. of Gut Environ. System, Natl. Inst. of Biomed. Innovation, Health and Nutr. (NIBIOHN), Japan*

**SY17-3** Symbiosis and co-evolution between bifidobacteria and humans, driven by human milk oligosaccharides

10:50

Takane Katayama

*Grad. Sch. of Bios., Kyoto Univ., Japan*

**SY17-4 Effects of partially hydrolyzed guar gum, a water soluble dietary fiber, on gut microbiome in stress-related gastrointestinal dysfunction**

11:15

Yuji Naito<sup>1</sup>, Tomohisa Takagi<sup>1</sup>, Ryo Inoue<sup>2</sup>, Zenta Yasukawa<sup>3</sup>, Makoto Ozeki<sup>3,4</sup>, Tsutomu Ohkubo<sup>3,4</sup><sup>1</sup>Dept. of Gastroenterol. and Hepatol., Kyoto Pref. Univ. of Med., Japan, <sup>2</sup>Lab. of Animal Sci., Dept. of Agric. and Life Sci, Kyoto Pref. Univ., Japan, <sup>3</sup>Nutr. Div., Taiyo Kagaku Co., Ltd., Japan, <sup>4</sup>Academic-Industrial Grad. Sch., Mie Univ., Japan**SY17-5 Aronia berry polyphenols improve barrier function and modulate expression of tight junctions in Caco-2 cells**

11:40

Jonathan C. Valdez, Bradley W. Bolling

Dept. of Food Sci. Univ. of Wisconsin-Madison, USA

**SY17-6 Suppressive effects of luteolin on serotonin production in RBL-2H3 cells**

11:50

Naoko Suga<sup>1</sup>, Hideyuki Arimitsu<sup>1,2</sup>, Akira Murakami<sup>1,2</sup>, Yoji Kato<sup>1,2</sup><sup>1</sup>Grad. Sch. of Human Sci. & Environ., Univ. of Hyogo, Japan, <sup>2</sup>Res. Inst. Food & Nutr. Sci., Univ. of Hyogo, Japan**Symposium 18****10:00-12:00 Room B****Functional Proteins & Peptides-1****Organizers:** Kenji Sato (Kyoto Univ., Japan)

Hitomi Kumagai (Nihon Univ., Japan)

Rotimi E. Aluko (Univ. of Manitoba, Canada)

**Chairs:** Hitomi Kumagai (Nihon Univ., Japan)

Jianping Wu (Univ. of Alberta, Canada)

**SY18-1 Identification and functional characterization of beef protein-derived bitter taste blocking peptides**

10:00

Rotimi E. Aluko<sup>1</sup>, Chunlei Zhang<sup>1</sup>, Adeola M. Alashi<sup>1</sup>, Nisha Singh<sup>2</sup>, Kun Liu<sup>2</sup>, Prashen Chelikani<sup>2</sup><sup>1</sup>Dept. of Food and Human Nutr. Sci., Univ. of Manitoba, Canada, <sup>2</sup>Dept. of Oral Biol., Univ. of Manitoba, Canada**SY18-2 Biofunctional properties of *Porphyra dioica* protein hydrolysates/peptides**

10:25

Richard J. FitzGerald, Maria Cermeno, Martina O' Keeffe

Dept. of Biol. Sci., Univ. of Limerick, Ireland

**SY18-3 Multiple physiological effects of dietary  $\beta$ -conglycinin in rats**

10:50

Kazunori Koba<sup>1</sup>, Koji Kawabeta<sup>1</sup>, Michihiro Sugano<sup>2,3</sup><sup>1</sup>Dept. of Nutr. Sci., Grad. Sch. of Human Health Sci., Univ. of Nagasaki, Japan, <sup>2</sup>Kyushu Univ., <sup>3</sup>Pref. Univ. Kumamoto, Japan**SY18-4 Identification of a novel cholesterol-lowering dipeptide (FP), and its down-regulation of intestinal ABCA1 in hypercholesterolemic rats**

11:15

Satoshi Nagaoka

Dept. of Appl. Life Sci., Fac. of Appl. Biol. Sci., Gifu Univ., Japan



## **SY18-5 Absorption of Cblin oligopeptide across Caco-2 cell monolayers and rat intestinal membrane**

11:40

Weilin Shen<sup>1</sup>, Mitsuru Tanaka<sup>1</sup>, Reiko Nakao<sup>2</sup>, Takeshi Nikawa<sup>2</sup>, Toshiro Matsui<sup>1</sup>

<sup>1</sup>Dept. of Biosci. Biotechnol., Grad. Sch. of Agric., Kyushu Univ., Japan, <sup>2</sup>Dept. of Nutr. Physiol., Inst. of Health Biosci., Tokushima Univ., Japan

## **Symposium 19**

10:00-12:00 Room C

Sponsored by Wakunaga Pharmaceutical Co., Ltd.

### **Wakunaga Symposium on Garlic Supplement**

**Chair:** Junji Terao (Konan Women's Univ., Japan)

#### **SY19-1 Antihypertensive effects of S-1-propenylcysteine, a sulfur compound in aged garlic extract, and its potential mechanism**

10:00

Toshiaki Matsutomo

Central Res. Inst., Wakunaga Pharmaceutical Co., Ltd., Japan

#### **SY19-2 Aged garlic extract and S-Allyl-L-cysteine cause apoptosis on human tumor cells due to mitochondrial membrane depolarization**

10:30

Yuta Kanamori<sup>1</sup>, Enzo Agostinelli<sup>1,2</sup>

<sup>1</sup>Dept. of Biochem. Sci. 'A. Rossi Fanelli', Sapienza Univ. of Rome, Italy, <sup>2</sup>Intl. Polyamines Found., Italy

#### **SY19-3 Anti-inflammatory effect of S-1-propenylcysteine in aged garlic extract**

11:00

Jun-ichiro Suzuki

Central Res. Inst., Wakunaga Pharmaceutical Co. Ltd., Japan

#### **SY19-4 A clinical study to evaluate efficacy of oral administration of aged garlic extract on periodontitis**

11:30

Avi Zini, Jonathan Mann, Yuval Vered

Fac. of Dental Med., Hebrew Univ. and Hadassah Med. Cent., Israel

## **Symposium 20**

10:00-12:00 Room D

### **Nutritional Regulation of Epigenetics**

**Organizers:** Shinjiro Hino (Kumamoto Univ., Japan)

Yasutomi Kamei (Kyoto Pref. Univ., Japan)

John Andrew Pospisilik (Van Andel Res. Inst., USA)

**Chairs:** Shinjiro Hino (Kumamoto Univ., Japan)

Yasutomi Kamei (Kyoto Pref. Univ., Japan)

#### **SY20-1 Reduced Dnmt3a increases Gdf5 expression with suppressed satellite cell differentiation and impaired skeletal muscle regeneration**

10:00

Yasutomi Kamei

Lab. of Mol. Nutr., Kyoto Pref. Univ., Japan

**SY20-2 Regulation of glucose and lipid metabolism in next generation by carbohydrate restriction during pregnancy**

10:20

Shizuka Hirai*Lab. of Food Nutr., Grad. Sch. of Hort., Chiba Univ., Japan***SY20-3 Epigenetic underpinnings of metabolic disease heterogeneity**

10:35

J. Andrew Pospisilik*Van Andel Res. Inst., USA***SY20-4 Epigenetic regulation of genes related to energy metabolism in perinatal mouse liver and its long-term effects in adulthood**

11:15

Xunmei Yuan<sup>1</sup>, Koshi Hashimoto<sup>2</sup>, Yoshihiro Ogawa<sup>3</sup>*<sup>1</sup>Dept. of Med. Metab., Grad. Sch. of Med. Dent. Sci., Tokyo Med. Dent. Univ., Japan, <sup>2</sup>Dept. of Int. Med., Div. of Diab, Endo. Hem., Dokkyo Med. Univ. Saitama Med. Cent., Japan, <sup>3</sup>Dept. of Med. Bioregul., Grad. Sch. of Med. Sci., Kyushu Univ., Japan***SY20-5 Roles of flavin-dependent histone demethylases in metabolic reprogramming**

11:35

Shinjiro Hino*Dept. of Med. Cell Biol., Inst. Mol. Embryol. Genet., Kumamoto Univ., Japan***Symposium 21****10:00-12:00 Room E****Natural Plant Pigments****Organizers:** Kiyotaka Nakagawa (Tohoku Univ., Japan)

Takanori Tsuda (Chubu Univ., Japan)

**Chairs:** Kiyotaka Nakagawa (Tohoku Univ., Japan)

Takanori Tsuda (Chubu Univ., Japan)

Barbara Shukitt-Hale (USDA, HNRCA at Tufts Univ., USA)

**SY21-1 Mechanistic studies on the cellular uptake of curcuminoids and preservation of squalene in foods**

10:00

Kiyotaka Nakagawa*Grad. Sch. of Agric. Sci., Tohoku Univ., Japan***SY21-2 Curcumin as a functional dietary factor: curcumin induces brown-like adipocyte formation in mice**

10:20

Takanori Tsuda, Sho Nishikawa*Coll. of Biosci. and Biotechnol., Chubu Univ., Japan***SY21-3 Anthocyanin bioavailability: Aspects and complexities**

10:40

Wilhelmina Kalt*Kentville Res. & Dev. Cent., Canada*

**SY21-4 Factors involved in the beneficial effects of polyphenols on neurochemical and behavioral changes in aging**

11:10

Barbara Shukitt-Hale, Marshall G. Miller, Derek R. Fisher, Grant A. Rutledge, Donna F. Bielinski, Tammy M. Scott  
*USDA/ARS Human Nutr. Res. Cent. on Aging at Tufts Univ., USA*

**SY21-5 Anti-inflammatory effect of siphonaxanthin and its underlying molecular mechanisms**

11:40

Yuki Manabe<sup>1</sup>, Natsuki Hashimoto<sup>1</sup>, Toshiro Okazaki<sup>2</sup>, Takashi Hirata<sup>1,3</sup>, Tatsuya Sugawara<sup>1</sup>  
<sup>1</sup>*Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan,* <sup>2</sup>*Res. Inst. of Bioresour. Biotech., Ishikawa Pref. Univ., Japan,* <sup>3</sup>*Shijonawate Gakuen Univ., Japan*

11:55 **Closing Remarks**

## Symposium 22

10:00-12:00 Room F

### Molecular Targets of Food Factors

**Organizers & Chairs:** De-Xing Hou (Kagoshima Univ., Japan)

Ah-Ng Tony Kong (The State Univ. of New Jersey, USA)

10:00 **Overview**

**SY22-1 Epigenetics and epigenomics studies of food factors: A new frontier**

10:05

Ah-Ng Tony Kong  
*Rutgers-The State Univ. of New Jersey, USA*

**SY22-2 cGMP mediates the beneficial effects of a green tea polyphenol, EGCG**

10:35

Motofumi Kumazoe, Yoshinori Fujimura, Hirofumi Tachibana  
*Div. of Appl. Biol. Chem., Dept. of Biosci. and Biotech., Fac. of Agric., Kyushu Univ., Japan*

**SY22-3 Protein kinases as molecular targets for cancer chemoprevention by dietary flavonoids**

10:55

De-Xing Hou<sup>1,2</sup>  
<sup>1</sup>*Dept. of Food Sci. & Biotech., Fac. of Agric.,* <sup>2</sup>*United Grad. Sch. of Agric Sci., Kagoshima Univ., Japan*

**SY22-4 Analysis of synergistic effects and molecular targets of natural compounds using monoclonal antibodies against natural compounds**

11:20

Takuhiro Uto<sup>1,2</sup>  
<sup>1</sup>*Dept. of Pharmacognosy, Fac. of Pharm. Sci., Nagasaki Intl. Univ., Japan,* <sup>2</sup>*Grad. Sch. of Pharm. Sci., Nagasaki Intl. Univ., Japan*

**SY22-5 Pyroglutamyl peptides with anti-obesity, which are distributed in Japanese fermented foods, regulate ERK phosphorylation through GPR109A and GPR81**

11:40

Saki Shirako<sup>1</sup>, Satoshi Miyauchi<sup>1</sup>, Vadivel Ganapathy<sup>2</sup>, Kenji Sato<sup>1</sup>  
<sup>1</sup>*Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan,* <sup>2</sup>*Dept. of Cell Biol. & Biochem., Texas Tech Univ., USA*

11:55 **Closing Remarks**

**Symposium 23****13:30-15:00 Room A****Bioactive Food Compounds for Brain Health & Function****Organizers & Chairs:** Yasuhiro Shirai (Kobe Univ., Japan)

Con Stough (Swinburne Univ., Australia)

13:30 **Opening Remarks****SY23-1 Understanding and improving cognitive function in the elderly with evidence-based nutraceuticals: data from the Australian Research Council Longevity Intervention (ARCLI)**

13:31

Con Stough, Tamara Simpson, Karen Savage, Karen Nolidin  
*Centre for Human Psychopharmacology, Swinburne Univ., Australia***SY23-2 The effects of glycogen on brain function**

13:51

Kazuko Kato  
*Inst. of Health Sci., Ezaki Glico Co., LTD, Japan***SY23-3 The mystery of GABA in brain**

14:09

Kah-Loon Wong<sup>1</sup>, Mujo Kim<sup>1</sup>, Yoshinori Katakura<sup>2</sup>  
<sup>1</sup>Pharma Foods Intl. Co. Ltd., Japan, <sup>2</sup>Dept. of Biosci. and Biotechnol., Fac. of Agric., Kyushu Univ., Japan**SY23-4 Amino acids to help improvement sleep quality**

14:27

Katsuya Suzuki  
*Tech. Dev. Cent., Inst. of Food Sci. and Tech., Ajinomoto Co., Inc., Japan***SY23-5 Study on the neuroprotective effect of  $\delta$ -tocotrienol on methylglyoxal-induced cranial injury in C57BL/6J mice**

14:45

Ying-Ling Lin<sup>1</sup>, Yun-Xuan Zhang<sup>1</sup>, Chung S. Yang<sup>2</sup>, Yu-Kuo Chen<sup>1</sup>, Hui-Yun Tsai<sup>3</sup>  
<sup>1</sup>Dept. of Food Sci., Natl. Pingtung Univ. of Sci. and Technol., Taiwan, <sup>2</sup>Dept. of Chem. Biol., Rutgers Univ., USA, <sup>3</sup>Dept. of Nutr. and Health Sci., Fooyin Univ., Taiwan**Symposium 24****13:30-15:00 Room B****Functional Proteins & Peptides-2****Organizers:** Kenji Sato (Kyoto Univ., Japan)

Hitomi Kumagai (Nihon Univ., Japan)

Rotimi E. Aluko (Univ. of Manitoba, Canada)

**Chairs:**

Rotimi E. Aluko (Univ. of Manitoba, Canada)

Hitomi Kumagai (Nihon Univ., Japan)

**SY24-1 Angiotensin converting enzyme 2 (ACE2) is a novel target of antihypertensive peptide IRW**

13:30

Jianping Wu<sup>1,2</sup>  
<sup>1</sup>Dept. Agric, Food & Nutr. Sci., <sup>2</sup>Cardiovascular Disease Res. Cent., Univ. of Alberta, Canada

**SY24-2 Bioactive peptides from dry meats and its relevance for health**

13:55 Fidel Toldrá<sup>1</sup>, Marta Gallego<sup>1</sup>, M-Concepción Aristoy<sup>1</sup>, Milagro Reig<sup>2</sup>, Leticia Mora<sup>1</sup>  
<sup>1</sup>*Inst. Agroquím. Tecnol. Alimentos (CSIC), Spain, <sup>2</sup>Inst. Ing. Alimentos Desarrollo, Univ. Politécnica Valencia, Spain*

**SY24-3 Application of MALDI-MS imaging technique for intestinal absorption process of bioactive peptides**

14:20 Toshiro Matsui  
*Grad. Sch. of Agric., Kyushu Univ., Japan*

**SY24-4 Cell-based assessment of the bioavailability of brewers' spent grain derived peptides**

14:45 Maria Cermeño, Martina O'Keeffe, Richard J. FitzGerald  
*Dept. of Biol. Sci., Univ. of Limerick, Ireland*

**Symposium 25****13:30-15:00 Room C****Omics Technologies**

**Organizers & Chairs:** Yoichi Sakakibara (Univ. of Miyazaki, Japan)  
 Yoshinori Fujimura (Kyushu Univ., Japan)

**SY25-1 Challenges in shotgun metaproteomics for microbiome**

13:30 Yasushi Ishihama  
*Dept. of Mol. Cell. Bioanal., Grad. Sch. of Pharm. Sci., Kyoto Univ., Japan*

**SY25-2 Application of metabolomics for high resolution phenotype analysis**

14:00 Eiichiro Fukusaki  
*Dept. of Biotechnol., Grad. Sch. of Eng., Osaka Univ., Japan*

**SY25-3 Cancelled****SY25-4 Computation-assisted annotation of biological activity to natural products in botanical supplements**

14:30 Jan F. Stevens<sup>1,3</sup>, Wenbin Wu<sup>1,3</sup>, Cristobal L. Miranda<sup>1,3</sup>, Ashish Vaswani<sup>2</sup>, Kevin S. Brown<sup>1</sup>,  
 Claudia S. Maier<sup>2</sup>  
<sup>1</sup>*Dept. of Pharmaceutical Sci., Oregon State Univ., USA, <sup>2</sup>Dept. of Chem., Oregon State Univ., USA,*  
<sup>3</sup>*Linus Pauling Inst., Oregon State Univ., USA*

**SY25-5 Targeted proteomics approach to the simultaneous evaluation of multiple functions of food components**

14:45 Katsuhisa Kurogi, Akira Ota, Kiyoko Nagahama, Masahito Suiko, Yoichi Sakakibara  
*Dept. of Biochem. Appl. Biosci., Fac. of Agric., Univ. of Miyazaki, Japan*

**Symposium 26****13:30-15:00 Room D****Minerals**

**Organizers & Chairs:** Hironori Yamamoto (Jin-ai Univ., Japan)  
Taiho Kambe (Kyoto Univ., Japan)

**SY26-1 Elaborate control of zinc-responsive ZNT1 expression on the cell surface**13:30 Taiho Kambe*Grad. Sch. of Biostudies., Kyoto Univ., Japan***SY26-2 Dietary phosphorus and human health**13:55 Masae Sakuma*Dept. of Human Nutr., Sch. of Life Sci., Sugiyama Jogakuen Univ., Japan***SY26-3 Effects of iron deficiency on reactive oxygen species and intracellular homeostasis**

14:20

Hirofumi Inoue<sup>1</sup>, Shi-Ichi Katsumata<sup>2</sup>, Rie Katsumata-Tsuboi<sup>1</sup>, Miori Tanaka<sup>1</sup>, Nobuyuki Takahashi<sup>1</sup>, Mariko Uehara<sup>1</sup><sup>1</sup>*Dept. of Nutr. Sci. and Food Safety, Fac. of Appl. Biosci, Tokyo Univ. of Agric., Japan*, <sup>2</sup>*Dept. of Nutr. Sci., Fac. of Appl. Biosci, Tokyo Univ. of Agric., Japan***SY26-4 Coated nano ZnO regulates the gene expression of short chain fatty acids receptors and the balance in microbial communities in feces of weaning pigs**

14:45

Hongnan Liu<sup>1,3</sup>, Miaomiao Bai<sup>1,2</sup>, Yulong Yin<sup>1,2</sup><sup>1</sup>*Inst. of Subtropical Agric, Chinese Academy of Sci., China*, <sup>2</sup>*South China Agric Univ., China*, <sup>3</sup>*Hunan Co-Innovation Cent. of Safety Animal Production, China***Symposium 27****13:30-15:00 Room E**

Sponsored by VUTEQ CORPORATION

**Biomarkers**

**Organizers:** Yoji Kato (Univ. of Hyogo, Japan)  
Noriyuki Miyoshi (Univ. of Shizuoka, Japan)  
Sayuri Miyamoto (Universidade de São Paulo, Brazil)

**Chairs:** Yoji Kato (Univ. of Hyogo, Japan)  
Noriyuki Miyoshi (Univ. of Shizuoka, Japan)

**SY27-1 Lipid related biomarkers in neurodegenerative diseases: lessons from an ALS model**

13:30

Sayuri Miyamoto<sup>1</sup>, Adriano B. Chaves-Filho<sup>1</sup>, Isabella F.D. Pinto<sup>1</sup>, Lucas S. Dantas<sup>1</sup>, Alex Inague<sup>1</sup>, Rodrigo L. Faria<sup>1</sup>, Marisa H.G. Medeiros<sup>1</sup>, Isaias Glezer<sup>2</sup>, Marcos Y. Yoshinaga<sup>1</sup><sup>1</sup>*Dept. of Biochem., Instituto de Química, Universidade de São Paulo, Brazil*, <sup>2</sup>*Dept. of Biochem., Escola Paulista de Medicina, Universidade Federal de São Paulo, Brazil*

- SY27-2 Development of a pre-symptomatic marker and its detection for Point of Care Testing (POCT)**  
13:53  
Kimiko Kazumura  
*Central Res. Lab., Hamamatsu Photonics K.K., Japan*
- SY27-3 Precise detection of various AGEs and simple detection of AGEs are useful for evaluation of metabolic abnormalities**  
14:11  
Ryoji Nagai<sup>1</sup>, Rei-ichi Ohno<sup>1</sup>, Hikari Sugawa<sup>1</sup>, Ryusuke Suzuki<sup>1,2</sup>, Nana Katsuta<sup>1</sup>, Shiori Sakake<sup>1</sup>, Seitaro Tanaka<sup>1</sup>, Yu-ki Tominaga<sup>1</sup>, Jun-ichi Shirakawa<sup>1</sup>, Mime Nagai<sup>1</sup>  
<sup>1</sup>*Dept. of Biosci., Grad. Sch. of Agric., Tokai Univ., Japan, <sup>2</sup>Orthopaedic Surgery., Sch. of Med., Jikei Univ., Japan*
- SY27-4 Identification of pro-inflammatory fecal volatile metabolites in high fat diet fed diabetic KK-A<sup>y</sup> mice**  
14:29  
Noriyuki Miyoshi  
*Grad. Sch. of Integrated Pharm. and Nutr. Sci., Univ. of Shizuoka, Japan*
- SY27-5 Altered metabolites related to sarcopenia in the skeletal muscles of aged mice**  
14:47  
Ran Uchitomi<sup>1</sup>, Yukino Hatazawa<sup>1</sup>, Nanami Senoo<sup>2</sup>, Kiyoshi Yoshioka<sup>3</sup>, Mariko Fujita<sup>1</sup>, Takahiko Shimizu<sup>4</sup>, Shinji Miura<sup>2</sup>, Yusuke Ono<sup>3</sup>, Yasutomi Kamei<sup>1</sup>  
<sup>1</sup>*Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ., Japan, <sup>2</sup>Grad. Sch. of Nutr. and Environ. Sci., Univ. of Shizuoka, Japan, <sup>3</sup>Inst. of Mol. Embryol. and Genet., Kumamoto Univ., Japan, <sup>4</sup>Dept. of Advanced Aging Med., Chiba Univ. Grad. Sch. of Med., Japan*

## Symposium 28

13:30-15:00 Room F

Sponsored by DHC Corporation

### Health and Beauty

**Chairs:** Seika Kamohara (Health Science Univ., Japan)  
Kentaro Naito (DHC Corporation, Japan)

- SY28-1 New strategies for health promotion and the extension of healthy life expectancy by Public-Private Partnerships in Japan**  
13:30  
Seika Kamohara<sup>1,2,3</sup>  
<sup>1</sup>*Health Sci. Univ., Japan, <sup>2</sup>DHC Co., Japan, <sup>3</sup>Nihon Pharm. Univ., Japan*
- SY28-2 Peptide transporters as a target for cosmetics**  
13:52  
Kentaro Naito  
*Fundamental Res. Lab., DHC Co., Japan*
- SY28-3 Formulation design to improve dissolution and disintegration of blueberry soft capsule**  
14:15  
Hiromasa Uchiyama<sup>1</sup>, Masakatsu Kageyama<sup>2</sup>, Riyo Kobashi<sup>2</sup>, Rie Ohmori<sup>2</sup>, Asuna Senda<sup>2</sup>, Kazunori Kadota<sup>1</sup>, Yuichi Tozuka<sup>1</sup>  
<sup>1</sup>*Osaka Univ. of Pharm. Sci., Japan, <sup>2</sup>DHC Co. Laboratories, Div., Japan*

**SY28-4 The era of full genome testing: Decoding gene-health and gene-beauty for personalized wellness**

14:37

Iri Sato-Baran

*Genesis Healthcare Co., Japan*

**Symposium 29**

**15:30-17:30 Room A**

Co-organized by Society for Free Radical Research Japan

**Antioxidant & Redox Regulation**

**Organizers:** Shinya Toyokuni (Nagoya Univ., Japan)

Ki Baik Hahm (CHA Univ., Korea)

Osamu Handa (Kawasaki Univ., Japan)

**Chairs:** Shinya Toyokuni (Nagoya Univ., Japan)

Osamu Handa (Kawasaki Univ., Japan)

**SY29-1 Role of ferroptosis in carcinogenesis and tumor biology**

15:30

Shinya Toyokuni

*Dept. Pathol. Biol. Responses, Nagoya Univ. Grad. Sch. Med., Japan*

**SY29-2 Nutrients as medicine for unmet medical need in gastroenterology**

16:00

Ki Baik Hahm<sup>1,2</sup>

*<sup>1</sup>Digestive Dis. Cent. CHA Univ. Sch. of Med., Korea, <sup>2</sup>CHA Cancer Prevention Res. Cent. CHA Bio Complex, Korea*

**SY29-3 *Enterococcus faecalis* FK-23 may improve the bactericidal activity of human neutrophils via ROS production and phagocytosis**

16:30

Hiroshi Ichikawa, Ryoga Higaki

*Grad. Sch. of Life and Med. Sci., Doshisha Univ., Japan*

**SY29-4 Exposome-induced oxidative stress on both epididymis and hippocampus in rats**

16:52

Yukiko Minamiyama<sup>1</sup>, Keiko Kobayashi<sup>1</sup>, Ririko Kawatani<sup>2</sup>, Mayuko Osada-Oka<sup>1</sup>, Shigekazu Takemura<sup>3</sup>, Hiroshi Ichikawa<sup>2</sup>

*<sup>1</sup>Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ., Japan, <sup>2</sup>Grad. Sch. of Life and Med. Sci.*

*Doshisha Univ., Japan, <sup>3</sup>Dept. of Hepato-Biliary-Pancreatic Surgery, Grad. Sch. of Med., Osaka City Univ., Japan*

**SY29-5 Cancelled**



**Symposium 30****15:30-17:30 Room B****Functional Proteins & Peptides-3****Organizers:** Kenji Sato (Kyoto Univ., Japan)

Hitomi Kumagai (Nihon Univ., Japan)

Rotimi E. Aluko (Univ. of Manitoba, Canada)

**Chairs:** Richard J. FitzGerald (Univ. of Limerick, Ireland)

Hitomi Kumagai (Nihon Univ., Japan)

**SY30-1 Bioprocessing for modifying food matrix structure, bioaccessibility and bioactivity of proteins and peptides**

15:30

Chibuikwe Udenigwe*Sch. of Nutr. Sci., Univ. of Ottawa, Canada***SY30-2 Bioactive peptides for preventing cognitive decline and its mechanistic exploration**

15:55

Shigeru Katayama, Soichiro Nakamura*Fac. of Agric., Shinshu Univ., Japan***SY30-3 Effects of yogurt fermentation on absorption of food-derived collagen peptides in human blood**

16:20

Yasutaka Shigemura<sup>1</sup>, Yuki Taga<sup>2</sup>, Yu Iwasaki<sup>1</sup><sup>1</sup>*Tokyo Kasei Univ., Japan*, <sup>2</sup>*Nippi Res. Inst. of Biomatrix, Japan***SY30-4 Suppressive effect of cereal albumin on blood glucose elevation**

16:45

Yusuke Yamaguchi<sup>1</sup>, Kazumi Ninomiya<sup>2</sup>, Shigenobu Ina<sup>1</sup>, Aya Hamada<sup>1</sup>, Fumie Shinmachi<sup>1</sup>, Hitoshi Kumagai<sup>2</sup>, Hitomi Kumagai<sup>1</sup><sup>1</sup>*Coll. of Bioresour. Sci., Nihon Univ., Japan*, <sup>2</sup>*Fac. of Home Economics, Kyoritsu Women's Univ., Japan***SY30-5 Novel anti-inflammatory peptides isolated from muscle protein of Thai indigenous chicken**

17:10

Phatthawin Lengkidworrapihat<sup>1,2</sup>, Sanchai Jaturasitta<sup>1,3,4</sup>, Akika Ejima<sup>5</sup>, Sirinya Taya<sup>3</sup>, Aroonrat Pharapirom<sup>2</sup>, Kenji Sato<sup>5</sup>, Rawiwan Wongpoomchai<sup>2,4</sup><sup>1</sup>*Dept. Anim. Aquat. Sci., Fac. Agric., Chiang Mai Univ., Thailand*, <sup>2</sup>*Dept. Biochem., Fac. Med., Chiang Mai Univ., Thailand*, <sup>3</sup>*Sci. Tech. Res. Inst., Chiang Mai Univ., Thailand*, <sup>4</sup>*Funct. Food Res. Cent. Well-Being, Chiang Mai Univ., Thailand*, <sup>5</sup>*Div. Appl. Biosci., Grad. Sch. Agric., Kyoto Univ., Thailand***Symposium 31****15:30-17:30 Room C**

Co-organized by The Intestinal Microbiology Society/formerly Japan Bifidus Foundation

**Allergy & Immune Modulation****Organizers & Chairs:** Satoshi Hachimura (Univ. of Tokyo, Japan)

Mamoru Totsuka (Nippon Vet. and Life Sci. Univ., Japan)

**15:30 Introduction: Immune modulation by food**

**SY31-1 Regulatory role of gut commensal microbes on gut homeostasis**15:55 [Mi-Na Kweon](#)<sup>1,2</sup>*<sup>1</sup>Mucosal Immunol. Lab., Dept. of Convergence Med., Univ. of Ulsan Coll. of Med., Korea, <sup>2</sup>Asan Med. Cent., Korea***SY31-2 Mechanisms of food allergy and its preventive targets**16:25 [Seiji Kawamoto](#)*Grad. Sch. Integr. Sci. Life, Hiroshima Univ., Japan***SY31-3 Dietary fiber pectin ameliorates type 1 diabetes in non-obese diabetic mice via caecum-mediated effects**

16:55

Chengfei Wu<sup>1,2</sup>, Xiaohua Pan<sup>1,2</sup>, Jianfang Li<sup>2</sup>, Li-Long Pan<sup>3</sup>, [Jia Sun](#)<sup>1,2</sup>*<sup>1</sup>State Key Lab. of Food Sci. and Technol., Jiangnan Univ., China, <sup>2</sup>Sch. of Food Sci. and Technol., Jiangnan Univ., China, <sup>3</sup>Sch. of Med., Jiangnan Univ., China***SY31-4 Structure-anti-allergic activity relationships of long-chain fatty acids and their derivatives**

17:10

In-Hae Kim<sup>1</sup>, Yoshiki Kanayama<sup>1</sup>, Takuya Sugahara<sup>1,2</sup>, [Kosuke Nishi](#)<sup>1,2</sup>*<sup>1</sup>Dept. of Biosci., Grad. Sch. of Agric., Ehime Univ., Japan, <sup>2</sup>Food Health Sci. Res. Ctr., Ehime Univ., Japan*17:25 **Closing Remarks****Symposium 32****15:30-17:30 Room D**

Co-organized by The Vitamin Society of Japan

**Insufficiency & Deficiency of Vitamins: Approach from Basic, Epidemiologic & Clinical Sciences****Organizers & Chairs:** Kiyoshi Tanaka (Kobe Gakuin Univ., Japan)

Naoko Tsugawa (Osaka Shoin Women's Univ., Japan)

**SY32-Op Overview**15:30 [Naoko Tsugawa](#)<sup>1</sup>*Dept. of Health and Nutr., Osaka Shoin Women's Univ., Japan***SY32-1 The exploration of Vitamin K binding protein using the novel fluorescent probes**

15:35

[Sho Sano](#)<sup>1</sup>, Yuki Ito<sup>1</sup>, Maya Kamao<sup>2</sup>, Yoshitomo Suhara<sup>1</sup>, Yoshihisa Hirota<sup>1</sup>*<sup>1</sup>Syst. Eng. and Sci., Grad. Sch. of Eng. and Sci., Shibaura Inst. of Tech., Japan, <sup>2</sup>Ext. Cent., Kobe Pharm. Univ., Japan*

**SY32-2 Vitamin D deficiency and its associated factors in healthy Malaysian pregnant women**

15:45

Siew Siew Lee<sup>1</sup>, Su Peng Loh<sup>1</sup>, Raman Subramaniam<sup>2</sup>, Maiza Tusimin<sup>3</sup>,  
King Hwa Ling<sup>4,5</sup>, Kartini Farah Rahim<sup>6</sup>

<sup>1</sup>Dept. of Nutr. & Dietetics, Fac. of Med. & Health Sci., Universiti Putra Malaysia, Malaysia, <sup>2</sup>Fetal Med. & Gynaecology Centre, Malaysia, <sup>3</sup>Dept. of Obstetrics & Gynaecology, Fac. of Med. & Health Sci., Universiti Putra Malaysia, Malaysia, <sup>4</sup>Dept. of Biomedical Sci., Fac. of Med. & Health Sci., Universiti Putra Malaysia, Malaysia, <sup>5</sup>Dept. of Genetics, Harvard Medical Sch., USA, <sup>6</sup>Avisena Specialist Hosp., Malaysia

**SY32-3 Elucidation of molecular mechanism of vitamin D actions using genetically modified rats in CYP27B1 or vitamin D receptor**

15:55

Toshiyuki Sakaki

Dept. of Pharm. Eng., Fac. of Eng., Toyama Pref. Univ., Japan

**SY32-4 Vitamin D: an essential resource of health – but not compatible with modern civilization?**

16:30

Joerg Spitz

Academy for Human Med., German Found. for Health Information and Prevention, Germany

**SY32-5 Insufficiency of B vitamins with its possible clinical implications**

17:05

Kiyoshi Tanaka<sup>1</sup>, Misoro Ao<sup>2</sup>

<sup>1</sup>Fac. of Nutr., Kobe Gakuin Univ., Japan, <sup>2</sup>Dept. of Food and Nutr., Kyoto Women's Univ., Japan

**Symposium 33****15:30-17:30 Room E****Autophagy & Programmed Cell Death**

**Organizers & Chairs:** Shivendra V. Singh (Univ. of Pittsburgh, USA)  
Taichi Hara (Waseda Univ., Japan)

**SY33-1 Autophagy & programmed cell death in cancer chemoprevention by dietary isothiocyanates**

15:30

Shivendra V. Singh

Dept. of Pharmacol. & Chem. Biol., Univ. of Pittsburgh, USA

**SY33-2 Delta-tocopherol induced endoplasmic reticulum (ER) stress causes ER phagy and apoptosis in bladder cancer models**

15:55

Christopher A. Blair<sup>1</sup>, Hanze Hu<sup>1</sup>, Tim Huynh<sup>1</sup>, Maggie Wu<sup>1</sup>, Chung S. Yang<sup>2</sup>, Xiaolin Zi<sup>1,3</sup>

<sup>1</sup>Dept. of Pharm. Sci., Univ. of California, USA, <sup>2</sup>Dept. of Chem. Biol., Rutgers, The State Univ. of New Jersey, USA, <sup>3</sup>Dept. of Urol., Univ. of California, USA

**SY33-3 Terpenes induce structure dependent autophagy and apoptosis in human colon cancer cells**

16:15

Kozue Sakao<sup>1,2</sup>, Kikuko Noridomi<sup>2</sup>, De-Xing Hou<sup>1,2</sup>

<sup>1</sup>Course of Biol. Sci. and Tech., The United Grad. Sch. of Agric. Sci., Kagoshima Univ., Japan, <sup>2</sup>Dept. of Biochemi. Sci. and Tech., Kagoshima Univ., Japan

**SY33-4 Physiological roles of autophagy under Zn deficiency in plants**

16:30 [Kohki Yoshimoto](#)  
*Meiji Univ., Japan*

**SY33-5 Application of autophagy to the health promotion**

16:55 [Taichi Hara](#)  
*Fac. of Human Sci. Waseda Univ., Japan*

**SY33-6 Exploration of bioactive food factors for the control of autophagy flux**

17:15 [Kohta Ohnishi](#)<sup>1</sup>, [Moe Fujimoto](#)<sup>2</sup>, [Maiko Sakai](#)<sup>3</sup>, [Teppei Fukuda](#)<sup>3</sup>, [Aika Ohnishi](#)<sup>3</sup>, [Hirokazu Ohminami](#)<sup>1</sup>, [Masashi Masuda](#)<sup>1</sup>, [Hisami Yamanaka-Okumura](#)<sup>1</sup>, [Yoshichika Kawai](#)<sup>1</sup>, [Yutaka Taketani](#)<sup>1</sup>  
*<sup>1</sup>Inst. of Biomed. Sci., Tokushima Univ., Japan, <sup>2</sup>Sch. of Med. Nutr., Tokushima Univ., Japan, <sup>3</sup>Grad. Sch. of Nutr. and Biosci., Tokushima Univ., Japan*

**Symposium 34****15:30-17:30 Room F**

Sponsored by Lion Corporation

**Lactoferrin Symposium by Lion Corporation**

**Organizers:** Noriyuki Monoi (Lion Co., Japan)  
Susumu Hiratsuka (Lion Co., Japan)  
**Chairs:** Michiaki Murakoshi (Lion Co., Japan)  
Megumi Aono (Lion Co., Japan)

**15:30 Opening Remarks**

[Megumi Aono](#)  
*Wellness Res. Laboratories., Lion Co., Japan*

**15:35 Overview**

[Michiaki Murakoshi](#)  
*Res. and Development Headquarter., Lion Co., Japan*

**SY34-1 Reducing effect of enteric-coated lactoferrin on visceral fat accumulation in Japanese men and women with abdominal obesity and its possible mechanisms**

[Tomoji Ono](#)  
*Wellness Res. Laboratories., Lion Co., Japan*

**SY34-2 Role of milk lactoferrin in improving neurodevelopment and cognition:****16:10 Biochemical studies to elucidate molecular mechanisms**

[Bing Wang](#)  
*Graham Centre for Agricultural Innovation, Charles Sturt Univ., Australia*

**SY34-3 The potentiating action of lactoferrin on the photic entrainment of the mammalian circadian clock**

16:50 [Takahiro Moriya](#)<sup>1,2</sup>, [Miho Sawauchi](#)<sup>1</sup>, [Takuya Kyoda](#)<sup>1</sup>, [Hidefumi Kuwata](#)<sup>3</sup>, [Etsumori Harada](#)<sup>4</sup>  
*<sup>1</sup>Dept. Cell. Sig., Grad. Sch. Pharm. Sci., Tohoku Univ., Japan, <sup>2</sup>Dept. Anat. & Physiol. Sch. Pharm. Sci., Ohu Univ., Japan, <sup>3</sup>NRL Pharma, Inc., Japan, <sup>4</sup>Dept. Veter. Med., Tottori Univ., Japan*

## December 4

### Plenary Lectures 5 & 6

8:30-9:30 Room A

Chair: Taiichiro Seki (Nihon Univ., Japan)

**PL5 Innovation of food science by the integration of multiple omics technologies**

8:30

Hisanori Kato

*Grad. Sch. of Agric. and Life Sci., Univ. of Tokyo, Japan*

Chair: Yuji Naito (Kyoto Pref. Univ. of Med., Japan)

**PL6 Flavonoids and inflammation: local and systemic effects**

9:00

Cesar G. Fraga<sup>1,2,3</sup>, Patricia I. Oteiza<sup>3,4</sup>

*<sup>1</sup>Fisicoquímica, Fac. Farmacia y Bioquímica, Universidad de Buenos Aires, Argentina, <sup>2</sup>IBIMOL-Universidad de Buenos Aires-CONICET, Argentina, <sup>3</sup>Dept. of Nutr., Univ. of California, USA, <sup>4</sup>Dept. Environ. Toxicol., Univ. of California, USA*

### Symposium 35

10:00-12:00 Room A

#### The Importance of Lipid Quality (Lipoquality) in Health and Disease

Organizers & Chairs: Makoto Arita (Keio Univ. / RIKEN, Japan)

Jun Ogawa (Kyoto Univ., Japan)

**SY35-1 Omega-3 fatty acid metabolism that confers anti-inflammation and tissue homeostasis**

10:00

Makoto Arita<sup>1,2,3</sup>

*<sup>1</sup>Div. of Physiol. Chem. and Metab., Grad. Sch. of Pharm. Sci., Keio Univ., Japan, <sup>2</sup>Lab. for Metabolomics, RIKEN-IMS, Japan, <sup>3</sup>Grad. Sch. of Med. Life Sci., Yokohama-City Univ., Japan*

**SY35-2 Metabolism of dietary omega-6 fatty acids by gut microbiota and host energy regulation**

10:25

Ikuo Kimura

*Dept. of Appl. Biol. Sci, Grad. Sch. of Agri., Tokyo Univ. of Agri. and Tech., Japan*

**SY35-3 Health promotion by gut microbial dietary fatty acid metabolism**

10:50

Jun Ogawa<sup>1</sup>, Michiki Takeuchi<sup>2</sup>, Akinori Ando<sup>1</sup>, Ryotaro Hara<sup>2</sup>, Shigenobu Kishino<sup>1</sup>

*<sup>1</sup>Div. Appl. Life Sci., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>Lab. Ind. Microbiol., Grad. Sch. of Agric., Kyoto Univ., Japan*

**SY35-4 RNA-seq analysis of the regulatory mechanism of the lipid metabolism pathways in ileum of broilers supplemented with quercetin**

11:15

Yao Li, Mi Wang, Linlin Ying, Fenglin Xiao, Yanjun Mao, Bo Wang, Shanshan Wang

*Dept. of Anim. Nutr. and Feed Sci., Coll. of Ani. Sci. and Tech., NE Agri. Univ., China*

**SY35-5 EPA/DHA dietary supplement compliance: Content claims and quality**11:30 [Gerard Bannenberg](#)*GOED (Global Organization for EPA and DHA Omega-3s), USA***Symposium 36****10:00-12:00 Room B****Phenolics & Antioxidants****Organizers:** Rong Tsao (Agric. and Agri-Food Canada, Canada)  
Kenji Sato (Kyoto Univ., Japan)**Chairs:** Rong Tsao (Agric. and Agri-Food Canada, Canada)  
Ronald Pegg (Univ. of Georgia, USA)**SY36-1 Chemical profiling and evaluation of antidiabetic activities of *Lepisanthes fruticosa* (Roxb) Leenh fruit extracts**

10:00

[Amin Ismail](#)<sup>1</sup>, AHS Mirfat<sup>1,2</sup>, K. Nur Kartinee<sup>3</sup>, H. Muhajir<sup>4</sup>, M.A. Mohd-Shukri<sup>2</sup><sup>1</sup>Dept. of Nutr. and Diet., Fac. of Med. and Health Sci., Univ. Putra Malaysia (UPM), Malaysia, <sup>2</sup>Malaysian Agric. Res. and Dev. Inst., Persiaran MARDI-UPM, Malaysia, <sup>3</sup>Dept. of Chem., Fac. of Sci., UPM, Malaysia, <sup>4</sup>Dept. of Microbiol., Fac. of Biotechnol. and Biomol. Sci., UPM, Malaysia**SY36-2 Dietary polyphenols: their antioxidant, anti-inflammatory and prebiotic effects**

10:20

[Rong Tsao](#)*Guelph Res. & Dev. Centre, Agric. and Agri-Food Canada, Canada***SY36-3 Transport of Georgia pecan phenolics across a Caco-2 monolayer**

10:40

[Ronald Pegg](#)<sup>1</sup>, Michelle Cheung<sup>1</sup>, Phillip Greenspan<sup>2</sup><sup>1</sup>Dept. of Food Sci. & Tech., Univ. of Georgia, USA, <sup>2</sup>Dept. Pharm. & Biomed. Sci., Univ. of Georgia, USA**SY36-4 Berry pomace - cheap and excellent source of valuable functional ingredients for foods and nutraceuticals**

11:00

[Petras R. Venskutonis](#)*Dept. of Food Sci. and Technol., Kaunas Univ. of Technol., Lithuania***SY36-5 Profile of phenolic bioactives of whole young garlic**

11:20

Joanna Skoczylas<sup>1</sup>, Kinga Dziadek<sup>1</sup>, Anneta Kopec<sup>1</sup>, Elżbieta Jędrszczyk<sup>2</sup>, [Jerzy Zawistowski](#)<sup>3</sup><sup>1</sup>Dept. of Human Nutr., Fac. of Food Technol., Univ. of Agric. in Kraków, Poland, <sup>2</sup>Dept. of Vegetable and Medicinal Plants, Fac. of Biotechnol. and Horticulture, Univ. of Agric. in Kraków, Poland, <sup>3</sup>Univ. of British Columbia, Fac. of Land and Food Systems, Food, Nutr. and Health, Vancouver, British Columbia, Canada**SY36-6 Enzymatic synthesis and stabilization of lipid ingredients**

11:40

[Colin J. Barrow](#), Taiwo Akanbi, Tim Nalder*Sch. of Life and Environ. Sci., Deakin Univ., Australia*

**Symposium 37****10:00-12:00 Room C****Exosome & microRNA****Organizers & Chairs:** Kei Sonoyama (Hokkaido Univ., Japan)

Janos Zempleni (Univ. of Nebraska-Lincoln, USA)

10:00 **Overview****SY37-1 Bioavailability, distribution and biological function of milk exosomes and their RNA cargos**

10:05

Janos Zempleni*Dept. of Nutr. and Health Sci., Univ. of Nebraska-Lincoln, USA***SY37-2 The possible role of milk-derived microRNAs**

10:35

Hirohisa Izumi*Morinaga Milk Ind. Co., Ltd., Japan***SY37-3 Possible connection between diet, health, and microRNA**

10:55

Kuratata Otsuka<sup>1,2</sup>*<sup>1</sup>Div. of Mol. Cell. Med., Natl. Cancer Cent. Res. Inst., Japan, <sup>2</sup>R&D Div., Kewpie Co., Japan***SY37-4 Exosome, a possible mediator of crosstalk between gut microbiota and host**

11:15

Kei Sonoyama*Div. of Fund. Agrisci., Res. Fac. of Agric., Hokkaido Univ., Japan***SY37-5 A novel antiobesity effect of garlic compound mediated through miRNA**

11:35

Takahiro Watanabe<sup>1</sup>, Ayana Ikeda<sup>1</sup>, Kiki Seo<sup>1</sup>, Atsushi Miura<sup>1</sup>, Yori Ozaki-Masuzawa<sup>2</sup>, Takashi Hosono<sup>1,2</sup>, Taiichiro Seki<sup>1,2</sup>*<sup>1</sup>Dept. of Appl. Life Sci., Grad. Sch. of Bioresour. Sci., Nihon Univ., Japan, <sup>2</sup>Dept. of Chem. and Life Sci., Coll. of Bioresour. Sci., Nihon Univ., Japan*11:50 **Closing Remarks****Symposium 38****10:00-12:00 Room D****Functional Carbohydrates****Organizers & Chairs:** Tomio Yabe (Gifu Univ., Japan)

Masashi Mizuno (Kobe Univ., Japan)

Ross D. Vasquez (Univ. Santo Tomas, Philippines)

**SY38-1 Inhibitory effect of sulfated polysaccharide from *Codium edule* P.C. Silva on 2,4-Dinitrofluorobenzene (DNFB)-induced allergic contact dermatitis on mice**

10:00

Ross D. Vasquez<sup>1,2,3</sup>, Martin Raemond B. Mallabo<sup>1</sup>, Mary Jho-Anne Corpuz<sup>1,2,3</sup>*<sup>1</sup>The Grad. Sch., Univ. of Santo Tomas, Philippines, <sup>2</sup>Dept. of Pharm., Fac. of Pharm., Univ. of Sto. Tomas, Philippines, <sup>3</sup>Res. Cent. for the Natrl. and App. Sci., Univ. of Sto. Tomas, Philippines*

**SY38-2 Dietary fiber pectin mitigates experimental colitis in a side chain-dependent manner**

10:20

Kohji Kitaguchi<sup>1,2,3</sup>, Keita Ishisono<sup>2</sup>, Tosiya Mano<sup>3</sup>, Tomio Yabe<sup>1,2,3,4</sup><sup>1</sup>Dept. of Appl. Life Sci., Fac. of Appl. Biol. Sci., Gifu Univ., Japan, <sup>2</sup>United Grad. Sch. of Agric. Sci., Gifu Univ., Japan, <sup>3</sup>Grad. Sch. of Nat. Sci. Technol., Gifu Univ., Japan, <sup>4</sup>G-CHAIN, Japan**SY38-3 The immunomodulating  $\beta$ -glucan can influence monocyte-macrophage differentiation in innate immunity and prevent inflammatory disease**

10:40

Ken-ichiro Minato<sup>1</sup>, Lisa C. Laan<sup>2</sup>, Irma van Die<sup>2</sup><sup>1</sup>Dept. of Appl. Biol. Chem., Meijo Univ., Japan, <sup>2</sup>Dept. of Mol. Cell Biol. Immunol., VU Univ. Med. Cent., the Netherlands**SY38-4 Application of  $\beta$ -glucan-binding proteins for measuring the  $\beta$ -glucan content of food materials**

11:00

Yoshiyuki Adachi, Kengo Kasahara, Yuka Hanayama, Takashi Kanno, Junko Tetsui, Daisuke Yamanaka, Ken-ichi Ishibashi, Naohito Ohno*Lab. Immunopharm. Microbial Products, Sch. of Pharm., Tokyo Univ. Pharm. & Life Sci., Japan***SY38-5 An establishment of NMR-based analytical assay for sulfated saccharides in solution**

11:20

Juneha Bak, Yoshiyuki Miyazaki, Toshirou Matsui*Dept. of Biosci. Biotechnol., Grad. Sch. of Agric., Kyushu Univ., Japan***SY38-6 Lean male and female mice respond differently to increasing dietary intake of high amylose wheat**

11:40

See Meng Lim<sup>1,3,4</sup>, Amanda Page<sup>2,3</sup>, Hui Li<sup>2,3</sup>, John Carragher<sup>1</sup>, Iain Searle<sup>1</sup>, Sarah Robertson<sup>2</sup>, Beverly Muhlhauser<sup>1,3,5</sup><sup>1</sup>Fac. of Sci., The Univ. of Adelaide, Australia, <sup>2</sup>Fac. of Health and Med. Sci., The Univ. of Adelaide, Australia, <sup>3</sup>South Australian Health and Med. Res. Inst., Australia, <sup>4</sup>Cent. for Community Health, Fac. of Health Sci., Universiti Kebangsaan Malaysia, Malaysia, <sup>5</sup>Commonwealth Sci. and Ind. Res. Organisation, Australia**Symposium 39****10:00-12:00 Room E****Emerging Roles of Hormesis in Health & Diseases****Organizers & Chairs:** Akira Murakami (Univ. of Hyogo, Japan)

Suresh I. S. Rattan (Aarhus Univ., Denmark)

10:00 **Overview****SY39-1 Hormesis-mediated mechanisms of action underlying bioactivities of phytochemicals**

10:03

Akira Murakami*Dept. of Food Sci. & Nutr., Sch. of Human Sci. & Environ., Univ. of Hyogo, Japan*



**SY39-2 Inter-tissue communication that intergenerationally regulates oxidative stress in *C. elegans***

10:41

Masaharu Uno<sup>1,2</sup>, Saya Kishimoto<sup>1,2</sup>, Emiko Okabe<sup>1,2</sup>, Masanori Nono<sup>1,2</sup>, Eisuke Nishida<sup>1,2</sup>  
<sup>1</sup>RIKEN Cent. for Biosystems Dynamics Res. (BDR), Japan, <sup>2</sup>Dept. of Cell. and Dev. Biol., Grad. Sch. of Biostudies, Kyoto Univ., Japan

**SY39-3 Hormesis and nutritional hormetins for healthy ageing and longevity**

11:19

Suresh I. S. Rattan  
 Dept. Mol. Biol. and Genet., Aarhus Univ., Denmark

11:57 **Closing Remarks****Symposium 40****10:00-12:00 Room F**

Co-organized by Japan Society of Nutrition and Food Science

**Food Science in the Big Data Era**

**Organizers:** Hisanori Kato (Univ. of Tokyo, Japan)  
 Shoko Takahashi (Genequest Inc, Japan)

**SY40-1 Relationship between early life body weight and adult diabetes: results from cohort consortium mega data**

10:00

Tao Huang<sup>1,2,3</sup>  
<sup>1</sup>Key Lab. of Mol. Cardiovascular Sci., Peking Univ., Ministry of Education, China, <sup>2</sup>Dept. of Global Health, Sch. of Public Health, Peking Univ., China, <sup>3</sup>Dept. of Epidemiol. and Biostat., Sch. of Public Health, Peking Univ. Health Sci. Cent., China

**SY40-2 Nutrigenomics research through personal genome service Genequest**

10:30

Shoko Takahashi  
 Genequest Inc., Japan

**SY40-3 Use of big data in food science: Exploring responder status of the gut microbiome for calcium absorption**

11:00

Corrie M. Whisner<sup>1</sup>, Owen Ma<sup>2</sup>, Arindam Dutta<sup>2</sup>, Daniel W. Bliss<sup>2</sup>, Cindy H. Nakatsu<sup>3</sup>, Connie M. Weaver<sup>4</sup>  
<sup>1</sup>Coll. of Health Solutions, Arizona State Univ., USA, <sup>2</sup>Sch. of Electrical, Computer and Energy Eng., Arizona State Univ., USA, <sup>3</sup>Dept. of Agronomy, Purdue Univ., USA, <sup>4</sup>Dept. of Nutr Sci., Purdue Univ., USA

**SY40-4 Bridging epigenomics and transcriptomics data for the understanding of long term effects of nutrition**

11:30

Hisanori Kato  
 Grad. Sch. of Agric. and Life Sci., Univ. of Tokyo, Japan

**Flash Talk Session 1****10:00-11:30 Room G****Flash Talk Presentations by Poster Presenters, Selected by ISNFF2019  
Local President**

Chair: Lijing Ke (Zhejiang Gongshang Univ., China)

**FT1-01 Albumin extracted from rice bran is resistant to digestion and adsorbs  
(PB0607) glucose**10:00 Chiaki Sugimoto<sup>1</sup>, Aya Hamada<sup>1</sup>, Shigenobu Ina<sup>1</sup>, Yusuke Yamaguchi<sup>1</sup>, Hitoshi Kumagai<sup>2</sup>, Hitomi Kumagai<sup>1</sup><sup>1</sup>Coll. of Bioresour. Sci., Nihon Univ., Japan, <sup>2</sup>Fac. of Home Economics, Kyoritsu Women's Univ., Japan**FT1-02 Flaxseed proteome as precursors of antioxidant peptides: An *in silico* study  
(PB0611)**10:05 Dawei Ji<sup>1</sup>, Chibuike Udenigwe<sup>2,3</sup>, Dominic Agyei<sup>1</sup><sup>1</sup>Dept. of Food Sci., Univ. of Otago, New Zealand, <sup>2</sup>Sch. of Nutr. Sci., Univ. of Ottawa, Canada, <sup>3</sup>Dept. of Chem. and Biomol. Sci., Univ. of Ottawa, Canada**FT1-03 Solvent extraction and discrimination of Kyoho skin, seed, and flesh  
(PB0727) antioxidant activities: An unsupervised case study using advanced  
chemometrics**

10:10

Kandi Sridhar, Albert Linton Charles

Dept. of Tropical Agric. and Intl. Cooperation, Natl. Pingtung Univ. of Sci. and Technol., Taiwan

**FT1-04 The p75NTR-positive fibroblasts from mouse skin respond to Pro-Hyp,  
(PC1808) collagen-derived peptide**10:15 Tomoko Asai<sup>1</sup>, Kazunobu Yoshikawa<sup>2</sup>, Kazuhiro Sawada<sup>2</sup>, Xin Wei<sup>2</sup>, Kenji Sato<sup>2</sup><sup>1</sup>Dept. of Food Sci. and Nutr., Fac. of Human Life and Environ. Sci., Nara Women's Univ., Japan, <sup>2</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan**FT1-05 Glutelin and its hydrolysate of color rice bran attenuated formation of  
(PC0711) preneoplastic lesions in liver and colon of carcinogens initiated rats**10:20 Aroonrat Pharapirom<sup>1</sup>, Akkasit Jongjareonrak<sup>2</sup>, Phatthawin Lengkidworraphiphat<sup>1,3</sup>, Kenji Sato<sup>4</sup>, Rawiwan Wongpoomchai<sup>1,5</sup><sup>1</sup>Dept. of Biochem., Fac. of Med., Chiang Mai Univ., Thailand, <sup>2</sup>Dept. of Food Eng., Fac. of Agro-ind., Chiang Mai Univ., Thailand, <sup>3</sup>Dept of Anim. and Aquat. Sci., Fac. of Agric., Chiang Mai Univ., Thailand, <sup>4</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>5</sup>Func. Food Res. Cen. Well-Being, Chiang Mai Univ., Thailand**FT1-06 Effects of carnosine on colon carcinogenesis in mice****(PC0703)** Jia-Huei Li<sup>1</sup>, Hsin-Ying Kuo<sup>1</sup>, Ya-Ting Chen<sup>2</sup>, Chih-Chung Wu<sup>3</sup>, Shu-Ling Hsieh<sup>1</sup>10:25 <sup>1</sup>Dept. of Seafood Sci., Natl. Kaohsiung Univ. of Sci. and Technol., Taiwan, <sup>2</sup>Coll. of Hydrosphere Sci., Natl. Kaohsiung Univ. of Sci. and Technol., Taiwan, <sup>3</sup>Dept. of Food and Nutr., Providence Univ., Taiwan**FT1-07 Study on the structure of oligopeptides with the function of improving  
(PB0620) athletic ability in industrial-scale produced corn gluten meal hydrolysate**10:30 Liang Chen

China Natl. Res. Inst. of Food and Fermentation Ind., China

**FT1-08 Study on the structure of oligopeptides with beauty effect in industrial-scale (PB0619) produced rice protein hydrolysate**

10:35 Yuqing Wang

*China Natl. Res. Inst. of Food and Fermentation Ind., China*

**FT1-09 Detection of cysteine peptides *in vitro* and *in vivo* digests of bovine (PD0112) lactoferrin**

10:40 Koji Kanazawa<sup>1</sup>, Akika Ejima<sup>2</sup>, Megumi Nakamura<sup>1</sup>, Yasushi A. Suzuki<sup>1</sup>, Kenji Sato<sup>2</sup>

<sup>1</sup>Biochem. Lab., Saraya Co. Ltd., Japan, <sup>2</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan

**FT1-10 Effect of glycosylation on the functional properties and conformational (PA0802) characteristics of oat proteins**

10:45 Hailing Wang<sup>1,2</sup>, Benyang Wu<sup>1,2</sup>, Yuande Shi<sup>1</sup>, Pingping Su<sup>1</sup>, Sheng Chen<sup>1</sup>, Shaoyun Wang<sup>3</sup>, Leiwen Xiang

<sup>1</sup>Fuqing Branch, Fujian Normal Univ., China, <sup>2</sup>Coll. of Life Sci., Fujian Normal Univ., China, <sup>3</sup>Coll. of Biosci. and Biotechnol., Fuzhou Univ., China

**FT1-11 Bioactive incidental food nanoparticles in black tea infusion exhibiting (PA0711) elevated antioxidant activity**

10:50 Lijing Ke, Huan Han, Guanzhen Gao, Jianwu Zhou, Pingfan Rao

*Food Nutr. Sci. Centre, Sch. of Food Sci. and Biotech., Zhejiang Gongshang Univ., China*

**FT1-12 Effect of HCl-treated wheat protein on antigen-presenting cells (PB0608) Hayato Kobayashi,**

10:55 Kumagai

*Coll. of Bioresour. Sci., Nihon Univ., Japan*

**FT1-13 Influence on Cheddar cheese proteolysis and sensory characteristics of (PA0108) non-starter strain *Lactobacillus plantarum***

11:00 Weiwei Bi<sup>1,2,4</sup>, Guixing Zhao<sup>2,3,4</sup>, Guangjin Wang<sup>2</sup>, Bixian Zhang<sup>1,2</sup>, Shuwen Lu<sup>5</sup>, Haofei Liu<sup>2</sup>, Jinrong Li<sup>2</sup>, Lei Chen<sup>2</sup>

<sup>1</sup>Heilongjiang Academy of Agric. Sci. Post-Doctoral Station, China, <sup>2</sup>Soybean Res. Inst., Heilongjiang Academy of Agric. Sci., China, <sup>3</sup>Coll. of Food Sci. and Eng., Harbin Univ. of Commerce, China, <sup>4</sup>Grain and Corn Eng. Technol. Res. Cent., China State Administration of Grain, China, <sup>5</sup>Inst. of Food Res., Heilongjiang Academy of Agric. Sci., China

**FT1-14 Gut microbiota modulation by vitamin A fortification in Muslim lactating (PC1208) women and infants**

11:05 Lukman Azis<sup>1</sup>, Siwaporn Pinkaew<sup>1</sup>, Santad Wichienchot<sup>2</sup>

<sup>1</sup>Dept. of Food Sci. and Nutr., Fact. of Sci. and Tech., Prince of Songkla Univ., Thailand, <sup>2</sup>IGS-Nutraceutical and Functional Food, Prince of Songkla Univ., Thailand

**FT1-15 Intra-rectal ethanol administration for colitis predisposition in a mouse (PC1213) model**

11:10 Fang-Yi Chu

*Dept. of Nutr., Chung Shan Med. Univ., Taiwan*

**Symposium 41****13:30-15:00 Room A****Chronobiology and Nutrition/Foods****Organizer:** Hiroyuki Sakakibara (Univ. of Miyazaki, Japan)**Chairs:** Hiroyuki Sakakibara (Univ. of Miyazaki, Japan)  
Yoko Yamashita (Kobe Univ., Japan)13:30 **Overview****SY41-1 Interaction between food factors and circadian clocks**13:35 Hideaki Oike*Food Res. Inst., NARO, Japan***SY41-2 Chrononutritional modulation of the circadian clock by amino acids**14:05 Shinobu Yasuo*Fac. of Agric., Kyushu Univ., Japan***SY41-3 Cacao polyphenol promotes energy metabolism under the circadian clock gene expressions**

14:35

Yoko Yamashita, Ken-yu Hironao, Hitoshi Ashida*Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan***SY41-4 Quantitative analysis of melatonin, serotonin and tryptophan content in fruits**

14:50

Thorung Pranil<sup>1,2</sup>, Patiwit Loypimai<sup>3</sup>, Anuchita Moongngarm<sup>1,2</sup><sup>1</sup>Dept. of Food Tech. and Nutr., Fac. of Tech., Mahasarakham Univ., Thailand, <sup>2</sup>Res. Unit of Nutr. for Health, Fac. of Tech., Mahasarakham Univ., Thailand, <sup>3</sup>Div. of Food Sci. and Tech., Fac. of Sci. and Tech., Bansomdejchapraya Rajabhat Univ., Thailand**Symposium 42****13:30-15:00 Room B****Global Fermented Foods –From Ethnography & Microbes to Metagenomics–****Organizers:** Dong-Hwa Shin (Chonbuk Natl. Univ., Korea)  
Kenji Sato (Kyoto Univ., Japan)**Chairs:** Dong-Hwa Shin (Chonbuk Natl. Univ., Korea)  
Kalidas Shetty (North Dakota state Univ., USA)13:30 **Overview****SY42-1 Metabolic strategies to advance indigenous and ethnic fermented foods for solutions to global public health challenges**

13:35

Kalidas Shetty*North Dakota State Univ., USA***SY42-2 Typical traditional fermented foods in Korea and their functionalities**

13:55

Dong-Hwa Shin*Dept. of Fd Sci. and Tech. Chonbuk Natl Univ., Korea*

**SY42-3 Miang, a traditional fermented tea from north Thailand and health benefit potentiality**

14:15

Chartchai Khanongnuch<sup>1,3</sup>, Chalermpong Saenjum Saenjum<sup>2,3</sup>, Kalidas Shetty<sup>4</sup>

<sup>1</sup>Div. of Biotechnol., Sch. Agro-Industry, Fac. of Agro-Industry., Chiang Mai Univ., Thailand, <sup>2</sup>Dept of Pharm. Sci., Fac. of Pharm. Chiang Mai Univ., Thailand, <sup>3</sup>Res. Cent. for Multidis. Approaches to Miang, Chiang Mai Univ., Thailand, <sup>4</sup>Glob. Inst. of Food Security and Int. Agri., Dept. of Plant Sci., North Dakota State Univ., USA

**SY42-4 Re-evaluation of fermented foods : From birth of fermentation foods and to rebirth for new era**

14:35

Dae Young Kwon

Korea Food Res. Inst., Korea

**14:55 Discussion & Closing Remarks**

## Symposium 43

13:30-15:00 Room C

### Taste & Olfaction

**Organizer:** Takumi Misaka (Univ. of Tokyo, Japan)

**Chairs:** Mee-Ra Rhyu (Korea Food Res. Inst., Korea)  
Takumi Misaka (Univ. of Tokyo, Japan)

**13:30 Overview**

**SY43-1 Umami-bitter interactions on human bitter taste receptor: evidence for direct binding of umami stimuli to T2R16**

13:35

Mee-Ra Rhyu

Div. of Food Functionality, Korea Food Res. Inst., Korea

**SY43-2 Sake and its aroma**

14:05

Atsuko Isogai

Natl. Res. Inst. of Brewing, Japan

**SY43-3 Molecular mechanisms of ligand recognition in the umami taste receptor, T1R1/T1R3**

14:25

Yasuka Toda<sup>1</sup>, Yoshiro Ishimaru<sup>1</sup>, Takumi Misaka<sup>2</sup>

<sup>1</sup>Dept. of Agric. Chem., Meiji Univ., Japan, <sup>2</sup>Dept. Appl. Biol. Chem., Univ. of Tokyo, Japan

**SY43-4 Effect of tamping force on aroma components in specialty espresso coffee**

14:45

Kazuya Iwai, Shota Matsuyama, Misako Kakiuchi, Shingo Ariki, Taiji Fukunaga

Innovation Cent., UCC Ueshima Coffee Co. Ltd., Japan

**Symposium 44****13:30-15:00 Room D****Protein Modification & Targeting****Organizers:** Claus Schneider (Vanderbilt Univ. Med. Sch., USA)

Mitsugu Akagawa (Osaka Pref. Univ., Japan)

**Chairs:** Claus Schneider (Vanderbilt Univ. Med. Sch., USA)

Sayuri Miyamoto (Universidade de São Paulo, Brazil)

**SY44-1 Mechanistic basis of protein binding by curcumin and other polyphenolic compounds**

13:30

Paula B. Luis, Fumie Nakashima, William E. Boeglin, Claus Schneider*Dept. of Pharmacol., Vanderbilt Univ. Med. Sch., USA***SY44-2 Irreversible inhibition of monoamine oxidases by serotonin-derived quinones**

13:55

Yoji Kato<sup>1,2</sup>, Sae Fujishima<sup>1</sup>, Naoko Suga<sup>1</sup>, Aoi Sugimoto<sup>1</sup>, Makoto Naoi<sup>3</sup>, Wakako Maruyama<sup>3</sup><sup>1</sup>*Sch. of Human Sci. & Environ., Univ. of Hyogo, Japan*, <sup>2</sup>*Res. Inst. for Food & Nutr. Sci., Univ. of Hyogo, Japan*, <sup>3</sup>*Dep. Health Nutr., Fac. Psychol. & Phys. Sci., Aichi Gakuin Univ., Japan***SY44-3 Identification of the target proteins of food factors with FG beads**

14:20

Yosuke Iizumi, Tomoyuki Taniguchi, Wakana Goi*Dept. of Mol.-Target. Cancer Prev., Grad. Sch. of Med. Sci., Kyoto Pref. Univ. of Med., Japan***SY44-4 Biological effects of oxyphytosterol generated by ozone**

14:45

Bianca S. Takayasu<sup>1</sup>, Anali D.M.B Garnique<sup>2</sup>, Gláucia M. Machado-Santelli<sup>2</sup>, Miriam Uemi<sup>3</sup>, Janice Onuki<sup>1</sup><sup>1</sup>*Lab. of Molecular Biol., Butantan Inst., Brazil*, <sup>2</sup>*Dept. of Cell Biol. and Dev., Inst. of Biomed. Sci., Univ. of São Paulo, Brazil*, <sup>3</sup>*Dept. of Chem., Inst. of Environ. Sci. Chem. and Pharm., Federal Univ. of São Paulo, Brazil***Symposium 45****13:30-15:00 Room E**

Sponsored by Nitta Gelatin Inc.

**Collagen peptide symposium –Mechanism and Effects on Arteriosclerosis and Diabetes mellitus–****Chair:** Hidekazu Yamada (Kindai Univ. Nara Hosp., Japan)**SY45-1 Food-derived and endogenous collagen peptide, Pro-Hyp –Function and target cell–**

13:30

Kenji Sato*Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan*

**SY45-2 A double-blind, placebo-controlled, randomized clinical study of the effect of porcine collagen peptide supplementation on atherosclerosis in healthy older individuals**

14:00

Michiya Igase<sup>1</sup>, Yoko Okada<sup>2</sup>, Masayuki Ochi<sup>2</sup>, Keiji Igase<sup>3</sup>, Naoki Inoue<sup>4</sup>, Seiko Koizumi<sup>4</sup>, Yasumasa Ohyagi<sup>2</sup>

<sup>1</sup>Dept. of Anti-aging Med., Ehime Univ. Grad. Sch. of Med., Japan, <sup>2</sup>Dept. of Geriatric Med. and Neurol., Ehime Univ. Grad. Sch. of Med., Japan, <sup>3</sup>Dept. of Advanced Neurosurgery, Ehime Univ. Grad. Sch. of Med., Japan, <sup>4</sup>Res. and Dev. Cent., Nitta Gelatin Incorporated, Japan

**SY45-3 Clinical study on two doses of collagen peptide as nutraceutical therapy in the management of diabetes mellitus (type II)**

14:30

Sriram Subbiah<sup>1</sup>, Suresh Kumar<sup>2</sup>, Shajil Madhavah<sup>2</sup>

<sup>1</sup>Aurous HealthCare R&D India Pvt. Ltd, India, <sup>2</sup>Nitta Gelatin India Limited, India

## Symposium 46

13:30-15:00 Room F

### Bone Health and Lifestyle

**Organizers & Chairs:** Yuko Tousen (Natl. Inst. of Biomed. Health and Nutr., Japan)  
Marlena C. Kruger (Massey Univ., New Zealand)

13:30 **Overview**

**SY46-1 Vitamin E in bone metabolism**

13:35

Toru Fukuda

Dept. of Food Sci., Tokyo Seiei Coll., Japan

**SY46-2 Combined effects of soy isoflavone and indigestible food components on equol production and bone mineral density**

13:55

Yuko Tousen

Dept. of Food Function and Labeling, Natl. Inst. of Biomed., Health and Nutr., Japan

**SY46-3 Bone, bone markers, and the response to dairy and other foods in older women**

14:15

Marlena C. Kruger

Sch. of Health Sci., Coll. of Health, Massey Univ., New Zealand

14:50 **Closing Remarks**

## Flash Talk Session 2

13:30-15:00 Room G

### Flash Talk Presentations by Poster Presenters, Selected by ISNFF2019 Local President

**Chair:** Charles (Chun) Hu (Amway Co., USA)

- FT2-01 Optimization of solar and mechanical drying methods to obtain the (PA0311) optimum flavor and bio-activities in ginger (*Zingiber officinale L*) powders**  
 13:30 Christofora Hanny Wijaya<sup>1,2</sup>, G. Permata Heru<sup>2</sup>, Lucia C. Soedirga<sup>2</sup>, E. Bimo Aksono<sup>3</sup>, Eko H. Purnomo<sup>1</sup>, Triyati D. Kencana W<sup>4</sup>, R.R. Fosa Sarassina<sup>5</sup>  
<sup>1</sup>Fac. of Agric. and Eng. Technol., Bogor Agric. Univ. (IPB Univ.), Indonesia, <sup>2</sup>Fac. of Sci. and Technol., Universitas Pelita Harapan, Indonesia, <sup>3</sup>Fac. of Veterinary Med., Surabaya, Airlangga, Indonesia, <sup>4</sup>Fac. of Math. and Nat. Sci., Institut Teknologi Bandung, Indonesia, <sup>5</sup>Sch. of Vocation, Universitas Gajah mada, Indonesia
- FT2-02 The challenge and opportunity of using botanical ingredients in plant-based (PD0718) dietary supplements and functional foods**  
 13:35 Charles (Chun) Hu  
 Nutrilite Health Inst., USA
- FT2-03 Evaluation of functional and sensory properties of Indonesian fermented (PD0708) rice bran**  
 13:40 Ardiansyah<sup>1</sup>, Wahyudi David<sup>1</sup>, Annisa Oktriani<sup>1</sup>, Dody Dwi Handoko<sup>2</sup>, Slamet Budijanto<sup>3</sup>, Hitoshi Shirakawa<sup>4</sup>  
<sup>1</sup>Dept. of Food Tech. Univ., Bakrie, Indonesia, <sup>2</sup>Indonesian Agency for Agric. Res., and Dev., Ministry Agric., Indonesia, <sup>3</sup>Fac. of Agric. Eng. and Tech., Bogor Agric. Univ., Indonesia, <sup>4</sup>Lab. of Nutr. Grad. Sch. of Agric. Sci., Tohoku Univ., Japan
- FT2-04 Color stability of anthocyanin extract from wastewater of purple sweet (PB0728) potato starch processing**  
 13:45 Elisa Julianti<sup>1,2</sup>, Ridwansyah Ridwansyah<sup>1,2</sup>, Era Yusraini<sup>1,2</sup>  
<sup>1</sup>Dept. of Food Sci. and Tech., Fac. of Agric., Universitas Sumatera Utara, Indonesia, <sup>2</sup>Centre for Tubers and Roots Crop Study, Fac. of Agric., Universitas Sumatera Utara, Indonesia
- FT2-05 Riceberry bran oil ameliorates oxidative stress and hepatotoxicity induced (PB0720) by acetaminophen overdose in mice**  
 13:50 Rawiwan Wongpoomchai<sup>1,2</sup>, Warunyoo Phannasorn<sup>1</sup>, Napaporn Khuanphram<sup>1</sup>, Suphachai Charoensin<sup>3</sup>  
<sup>1</sup>Dept. of Biochem., Fac. Med., Chiang Mai Univ., Thailand, <sup>2</sup>Func. Food Res. Cen. for Well-Being, Chiang Mai Univ., Thailand, <sup>3</sup>Div. Nutr., Sch. Med Sci, Univ. Phayao, Thailand
- FT2-06 Breeding grapefruit for low cytochrome P4503A4 inhibition (PC1602)** Yelena Guttman<sup>1</sup>, Iris Yedidia<sup>2</sup>, Adi Nudel<sup>1</sup>, Yuliya Zhmykhova<sup>1</sup>, Nir Carmi<sup>2</sup>, Zohar Kerem<sup>1</sup>  
 13:55 <sup>1</sup>Inst. of Biochem., Food Sci. and Nutr., The Robert H. Smith Fac. of Agric., Food and Environ., The Hebrew Univ. of Jerusalem, Israel, <sup>2</sup>Inst. of Plant Sci., Agric. Res. Organization, Volcani Cent., Israel
- FT2-07 Studies on nutritional and antioxidative properties of raw and instant blue (PD0709) rices**  
 14:00 Puspita Sari<sup>1</sup>, Nita Kuswardhani<sup>1</sup>, Maryanto<sup>1</sup>, Dewi Astuti<sup>1</sup>, Shafira<sup>1</sup>, Tomoyuki Yoshino<sup>2</sup>  
<sup>1</sup>Dept. of Agric. Product Technol., Fac. of Agric. Technol., Univ. of Jember, Indonesia, <sup>2</sup>Dept. of Life Sci., Fac. of Life and Environ. Sci., Pref. Univ. of Hiroshima, Japan
- FT2-08 Stability of encapsulated *Spirulina platensis* treated with basil leaf and (PD0715) different ratio of coating material against heating during storage**  
 14:05 Tri Winarni Agustini, Ulfah Amalia, Retno Ayu Kurniasih  
 Dept. of Fish. Technol, Diponegoro Univ., Indonesia



**FT2-09 Effect of the *Lactobacillus*-lemon fermented product on antioxidative (PA0102) activity in Clone-9 cells**

14:10 Yu-Wen Huang<sup>1</sup>, Chen-Yu Xie<sup>1</sup>, Chih-Yao Hou<sup>1</sup>, Shu-Ling Hsieh<sup>1</sup>, Chih-Chung Wu<sup>2</sup>  
<sup>1</sup>Dept. of Seafood Sci., Natl. Kaohsiung Univ. of Sci. and Technol., Taiwan, <sup>2</sup>Dept. of Food and Nutr., Providence Univ., Taiwan

**FT2-10 Diet of anaogue rice increase insulin serum and TCF7L2 gene expression on (PA0808) rat model of type 2 diabetes mellitus**

14:10 Rumiyati<sup>1</sup>, Rizqa Salsabila Firdausia<sup>1</sup>, Gravinda Widyaswara<sup>2</sup>, Agung Endro Nugroho<sup>1</sup>, Yekti Asih Purwestri<sup>2</sup>, Yudi Pranoto<sup>3</sup>, Sri Widyastuti<sup>4</sup>, Satrijo Saloko<sup>4</sup>, Muktasam Muktasam<sup>5</sup>  
<sup>1</sup>Fac of Pharm., Universitas Gadjah Mada, Infonesia, <sup>2</sup>Fac of Biol., Universitas Gadjah Mada, Indonesia, <sup>3</sup>Fac. of Food and Agricultural Product Technol., Universitas Gadjah Mada, Indonesia, <sup>4</sup>Fac. of Food Technol. and Agroindustry, Universitas Mataram, Indonesia, <sup>5</sup>Dept. of Sosio Economic, Fac. of Agric., Universitas Mataram, Indonesia

**FT2-11 Addition of pigeon pea for improve physicochemical properties, cooking (PD0609) quality and analog rice acceptability based on mocaf and seaweed**

14:20 Satrijo Saloko<sup>1</sup>, Sisca Diani Rosalina<sup>2</sup>, Yudi Pranoto<sup>2</sup>, Supriyadi<sup>2</sup>, Sri Widyastuti<sup>1</sup>, Muktasam<sup>1</sup>, Rumiyati<sup>2</sup>, Agung Endro Nugroho<sup>2</sup>, Yekti Asih Purwestri<sup>2</sup>, Janet Reid<sup>3</sup>  
<sup>1</sup>Mataram Univ., Indonesia, <sup>2</sup>Universitas Gadjah Mada, Indonesia, <sup>3</sup>Massey Univ., Indonesia

**FT2-12 Antioxidant and antiproliferation of young rice leaves (RD6 and BGR) (PC0709) Visessakseth So<sup>1,3</sup>, Wipawee Thukhammee<sup>2,3</sup>, Jintanaporn Wattanathorn<sup>2,3</sup>,**

14:25 Natthida Weerapreeyakul<sup>3,4</sup>  
<sup>1</sup>Grad. Sch. (Pharm. Sci.), Fac. of Pharm. Sci., Khon Kaen Univ., Thailand, <sup>2</sup>Dept. of Physiol., Fac. of Med., Khon Kaen Univ., Thailand, <sup>3</sup>Human High Performance and Health Promotion (HHP&HP) Res. Inst., Khon Kaen Univ., Thailand, <sup>4</sup>Div. of Pharm. Chem., Fac. of Pharm. Sci., Khon Kaen Univ., Thailand

**FT2-13 Supplementation of Morin attenuates oxidative stress and muscle wasting (PC1701) in mouse C2C12 skeletal myotubes treated with dexamethasone**

14:30 Anayt Ulla, Takayuki Uchida, Yukari Miki, Kosuke Sugiura, Ayako Ohno, Reiko Nakao, Takeshi Nikawa  
 Dept. of Nutr. Physiol., Inst. of Med. Nutr., Tokushima Univ. Grad. Sch., Japan

**FT2-14 Suppressive effect of garlic-odor precursor on blood-ethanol elevation (PB0902) Taisei Hagio<sup>1</sup>, Ayumu Hase<sup>1</sup>, Yusuke Yamaguchi<sup>1</sup>, Harumi Uto-Kondo<sup>1</sup>, Takeshi**

14:35 Saito<sup>2</sup>, Hitomi Kumagai<sup>1</sup>  
<sup>1</sup>Coll. of Bioresour. Sci., Nihon Univ., Japan, <sup>2</sup>ACERA Food R&D Cent., ACERA Co., Ltd, Japan

**FT2-15 Regulatory/modulatory effect of prune essence concentrate on the (PA0211) intestinal function and blood lipids**

14:40 Kamesh Venkatakrisnan, Chin-Kun Wang  
 Sch. of Nutr., Chung Shan Med. Univ., Taiwan

**Symposium 47****15:30-17:00 Room A****The Japanese Specific Food Labeling System – Food with Functional Claims –**

**Organizers:** Koichi Aizawa (KAGOME Co., Ltd., Japan)  
Noriyuki Monoi (Lion Co., Japan)

**Chairs:** Makoto Shimizu (Tokyo Univ. of Agric., Japan)  
Kazutaka Yoshida (KAGOME Co., Ltd., Japan)

15:30 **Overview**

**SY47-1 An expansion of the functional food market in Japan - Put the problems into perspectives -**

15:35

Makoto Shimizu<sup>1,2</sup>

<sup>1</sup>Univ. of Tokyo, Japan, <sup>2</sup>Tokyo Univ. of Agric., Japan

**SY47-2 Development of functional agricultural products and the use of labeling system of “Foods with Function Claims” in Japan**

16:00

Mari Maeda-Yamamoto

*Natl. Agric. and Food Res. Organization, Japan*

**SY47-3 The Japanese specific food labeling system - Foods with Functional Claims**

16:20

Takeshi Morita, Nobuhiko Akasaki

*Food Labelling Div., Consumer Affair Agency, Japan*

**SY47-4 Health effects of adlay tea intake in healthy adults**

16:40

Hirohito Ishikawa<sup>1</sup>, Masahiro Nakano<sup>2</sup>, Hiroe Shinohara<sup>2</sup>, Takamasa Masuda<sup>1</sup>, Masashi Nagai<sup>1</sup>, Kimiko Kazumura<sup>3</sup>, Mika Mochizuki<sup>4</sup>, Toshihiko Osawa<sup>4</sup>

<sup>1</sup>Healthcare Systems Co., Ltd., Japan, <sup>2</sup>Shin-Oyama City Hosp., Japan, <sup>3</sup>Hamamatsu Photonics K.K., Japan, <sup>4</sup>Dept. of Health and Nutr., Fac. of Psychol. and Phys. Sci., Aichi Gakuin Univ., Japan

16:55 **Closing Remarks**

**Symposium 48****15:30-17:30 Room B**

Co-organized by The Intestinal Microbiology Society/formerly Japan Bifidus Foundation

**Probiotics & Prebiotics**

**Organizers:** Koji Hase (Keio Univ., Japan)  
Itsuko Fukuda (Kobe Univ., Japan)

**Chairs:** Philippe Langella (INRA, France)  
Akira Hosono (Nihon Univ, Japan)

15:30 **Overview**

- SY48-1 Effects of quercetin on human intestinal microbiota and short-chain fatty acids production**  
15:35 Itsuko Fukuda<sup>1</sup>, Ro Osawa<sup>2</sup>  
*<sup>1</sup>Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan, <sup>2</sup>Dept. of Bioresour. Sci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan*
- SY48-2 Nutritional signals regulate lymphocyte homing to gut-associated lymphoid tissue**  
15:55 Koji Hase<sup>1,2</sup>  
*<sup>1</sup>Div. of Biochem., Fac. of Pharm., Keio Univ., Japan, <sup>2</sup>Int. R&D Cent. for Muc. Vaccin., Inst. of Med. Sci., Univ. of Tokyo, Japan*
- SY48-3 Potential of human-residential bifidobacteria**  
16:20 Toshitaka Odamaki  
*Next Generation Sci. Inst., Morinaga Milk Ind.Co., Ltd., Japan*
- SY48-4 Our intestinal microbiota as a source of next-generation probiotics for human and animal health**  
16:45 Philippe Langella, R. Martin-Rosique, S. Miquel, C. Michon, C. Bridonneau, F. Chain, M. Thomas, J.M. Chatel, L. Bermudezand, H. Sokol  
*Commensal and Probiotics-Host Interactions Lab., Micalis Inst., INRA, AgroParisTech, Université Paris-Saclay, France*
- SY48-5 Soluble dextrin fibre - New functional carbohydrates from potato starch: From structure, through innovative applications to health**  
17:10 Janusz Kapusniak<sup>1</sup>, Renata Barczynska<sup>1</sup>, Kamila Kapusniak<sup>2</sup>  
*<sup>1</sup>Dept. of Dietetics and Food Studies, Jan Dlugosz Univ., Poland, <sup>2</sup>Dept. of Biochem., Biotech. and Ecotox., Jan Dlugosz Univ., Poland*
- 17:25 **Closing Remarks**

## Symposium 49

15:30-17:00 Room C

### ACS-JSoFF Joint Session

**Organizers & Chairs:** Akira Murakami (Univ. of Hyogo, Japan)

Alyson E. Mitchell (Univ. of California Davis, USA)

15:30 **Overview**

#### SY49-1 Kefir prevents obesity and metabolic dysfunction in mice fed high fat diets

15:35 Hyunsook Kim<sup>1</sup>, Dong-Hyeon Kim<sup>2</sup>, Kunho Seo<sup>2</sup>, Wallace Yokoyama<sup>3</sup>

*<sup>1</sup>Dept. of Food and Nutr., Coll. of Ecol., Hanyang Univ., Korea, <sup>2</sup>Cent. for One Health, Coll. of Veterinary Med., Konkuk Univ., Korea, <sup>3</sup>USDA, ARS, Western Regional Res. Cent., USA*

#### SY49-2 Tropical fruits of Solanaceae family as health-promoting food ingredients

15:51 Coralia Osorio<sup>1</sup>, Tatiana Cuadrado<sup>1</sup>, Danny Leandro Ortiz<sup>2</sup>, Carlos Orrego<sup>2</sup>

*<sup>1</sup>Dept. de Quimica, Universidad Nacional de Colombia, Colombia, <sup>2</sup>Inst. de Biotecnologia y Agroindustria, Universidad Nacional de Colombia, Colombia*

**SY49-3 Modern analytical techniques to unravel desired and undesired bio-active compounds in food**

16:07

Michael Granvogl

*Univ. of Hohenheim, Inst. of Food Chem., Section Food Chem. and Anal. Chem., Germany*

**SY49-4 Enhancement of anti-inflammatory activity of *Bifidobacterium adolescentis* by polyphenols**

16:23

Kyuichi Kawabata

*Fac. Clin. Nutr. Diet., Konan Women's Univ., Japan*

**SY49-5 Possible abilities of dietary factors to prevent and treat diabetes via the stimulation of glucagon-like peptide-1 secretion**

16:39

Takanori Tsuda

*Coll. of Biosci. and Biotechnol., Chubu Univ., Japan*

**16:55 Discussion & Closing Remarks**

**Symposium 50**

**15:30-17:30 Room D**

**Herbs & Spices: Function to Informatics**

**Organizers:** Krishnapura Srinivasan (CSIR - Central Food Technol. Res. Inst., India)

Hiroe Kikuzaki (Nara Women's Univ., Japan)

Yoko Iijima (Kanagawa Inst. Technol., Japan)

**Chairs:** Hiroe Kikuzaki (Nara Women's Univ., Japan)

Yoko Iijima (Kanagawa Inst. Technol., Japan)

**15:30 Overview**

**SY50-1 Role of spices in human health and wellness**

15:35

Krishnapura Srinivasan

*Dept. of Biochem., CSIR - Central Food Technol. Res. Inst., India*

**SY50-2 Metabolomics & foodomics data science: From KNAPSAcK DB to deep learning-**

16:10

Shigehiko Kanaya

*Dev. of Inf. Sci, Grad. Sch. of Sci. and Technol., Nara Inst. of Sci. and Technol., Japan*

**SY50-3 Biosynthesis and regulation of herb volatiles: Chemical diversity and biosynthetic evolution**

16:40

Takao Koeduka

*Div. of Agric. Sci., Grad. Sch. of Sci. Tech. Innov., Yamaguchi Univ., Japan*

**17:10 Closing Remarks**

**Symposium 51****15:30-17:00 Room E**

Co-organized by Japanese Association for Animal Cell Technology

**Functional Assessment of Food Factors**

**Organizers:** Chin-Kun Wang (Chung Shan Med. Univ., Taiwan)  
 Takuya Sugahara (Ehime Univ., Japan)  
 Hideo Satsu (Maebashi Inst. of Technol., Japan)

**Chairs:** Takuya Sugahara (Ehime Univ., Japan)  
 Hideo Satsu (Maebashi Inst. of Technol., Japan)

**SY51-1 Functional assessment of propolis extracts on oral cancer**

15:30 Chin-Kun Wang  
*Chung Shan Med. Univ., Taiwan*

**SY51-2 Novel health benefits of eggplant**

15:55 Kozo Nakamura<sup>1,2</sup>  
<sup>1</sup>Dept. of Agric., Grad. Sch. of Sci. and Tech., Shinshu Univ., Japan, <sup>2</sup>Inst. of Agric., Acad. Assy., Shinshu Univ., Japan

**SY51-3 Nutritional and physiological significance of dietary sphingomyelin**

16:20 Yutaka Miura  
*Div. of Appl. Biol. Sci., Grad. Sch. of Agric., Tokyo Univ. of Agric. & Tech., Japan*

**SY51-4 Effect of sweet potato and *Lactobacillus plantarum* Mut 7 consumption on the similarity of bacterial community on Sprague Dawley rat's digesta**

16:45 Puspita M. Sari<sup>1</sup>, Lily A. Lestari<sup>2</sup>, Jaka Widada<sup>3</sup>, Eni Harmayani<sup>4</sup>  
<sup>1</sup>Dept. of Nutr., Universitas Respati Yogyakarta, Indonesia, <sup>2</sup>Dept. of Nutr., Fac. of Med., Universitas Gadjah Mada, Indonesia, <sup>3</sup>Fac. of Agric., Universitas Gadjah Mada, Indonesia, <sup>4</sup>Fac. of Agric. Tech., Universitas Gadjah Mada, Indonesia

**Symposium 52****15:30-17:00 Room F**

Sponsored by Amino Up Co., Ltd.

**Sports and Athletic Performance****Chair:** Kenji Sato (Kyoto Univ., Japan)**SY52-1 As a supporter of dreams and emotions**

15:30 Yuichi Nishimura  
*2010·2014 FIFA World Cup Referee, Japan*

**SY52-2 Studies on functional foods from cell to human: An example of a standardized oligomerized-polyphenol from *Litchi chinensis* fruit extract (OPLFE)**

16:30 Mikio Nishizawa  
*Dept. of Biomed. Sci., Coll. of Life Sci., Ritsumeikan Univ., Japan*

**Flash Talk Session 3****15:30-17:00 Room G****Flash Talk Presentations by Poster Presenters, Selected by ISNFF2019  
Local President**

Chair: Yasutaka Shigemura (Tokyo Kasei Univ., Japan)

**FT3-01 Chlorophyll C2 uptake by Caco-2 cells through modulation of the human (PA0504) ATP-binding cassette transporter family**15:30 Eko Susanto<sup>1,2</sup>, Fumiaki Beppu<sup>1</sup>, Masashi Hosokawa<sup>1</sup>, Kazuo Miyashita<sup>1</sup><sup>1</sup>Dept. of Marine Bioresour. Chem., Grad. Sch. of Fish. Sci., Hokkaido Univ., Japan, <sup>2</sup>Dept. Fish. Prod. Tech., Fac. Fish. and marine Sc., Diponegoro Univ., Indonesia**FT3-02 Garlic-odor precursor suppresses melanoma tumor growth by inducing (PB0901) apoptosis**15:35 Tomoya Sakaguchi<sup>1</sup>, Tomoaki Yazaki<sup>1</sup>, Yusuke Yamaguchi<sup>1</sup>, Hiroyuki Hara<sup>2</sup>, Hitomi Kumagai<sup>1</sup><sup>1</sup>Coll. of Bioresour. Sci., Nihon Univ., Japan, <sup>2</sup>Sch. of Med., Nihon Univ., Japan**FT3-03 Induction of phase II enzymes by a flavor compound from radish sprouts (PB0903) Kazuki Ogawa, Mikio Sugiki, Yusuke Yamaguchi, Hitomi Kumagai**15:40 Kazuki Ogawa, Mikio Sugiki, Yusuke Yamaguchi, Hitomi Kumagai  
Dept. of Chem. and Life Sci., Nihon Univ., Japan**FT3-04 Inhibition of AGEs formation by Lotus Seedpod Oligomeric Procyanidins (PC1901) through RAGE-MAPK signaling and NF- $\kappa$ B activation in high-fat-diet rats**15:45 Qian Wu

Sch. of Food and Biol. Eng., Hubei Univ. of Technol., China

**FT3-05 Analysis of deep sea water on lipid accumulation and inflammation in high (PC1320) fat diet-induced obese hamster**15:50 Min-Chun Chang<sup>1</sup>, Shu-Ya Wu<sup>1</sup>, Chu-Chyn Ou<sup>1</sup>, David Pei-Cheng Lin<sup>2</sup>, Han-Hsin Chang<sup>1</sup><sup>1</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan**FT3-06 The effects of sulfuric odors of garlic and thier precursors on HDL- (PC0803) mediated cholesterol efflux from the macrophages**15:55 Harumi Uto-Kondo<sup>1</sup>, Shiori Kawahara<sup>1</sup>, Katsunori Ikewaki<sup>2</sup>, Hitomi Kumagai<sup>3</sup><sup>1</sup>Dept. of Biosci. in Daily Life, Nihon Univ., Japan, <sup>2</sup>Dept. of Intern. Med., Natl. Def. Med. Coll., Japan, <sup>3</sup>Dept. of Chem. and Life Sci., Nihon Univ., Japan**FT3-07 Renal histopathology under the influence of Klotho gene deficiency (PD0902) Yu-Shan Tseng<sup>1</sup>, Bao-Sheng Xu<sup>1</sup>, David Pei-Cheng Lin<sup>2</sup>, Han-Hsin Chang<sup>1</sup>**16:00 Yu-Shan Tseng<sup>1</sup>, Bao-Sheng Xu<sup>1</sup>, David Pei-Cheng Lin<sup>2</sup>, Han-Hsin Chang<sup>1</sup>  
<sup>1</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan**FT3-08 Either calf or mid-arm circumference could be a simple marker for (PD0304) screening of pre-sarcopenia in the middle-aged elderly**16:05 Po-Sheng Chang<sup>1</sup>, Chi-Hua Yen<sup>2,3,4</sup>, Ching-Ju Chiu<sup>1</sup>, Yu-Yun Huang<sup>1</sup>, Ping-Ting Lin<sup>1</sup><sup>1</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Sch. of Med., Chung Shan Med. Univ., Taiwan, <sup>3</sup>Dept. of Family and Community Med., Chung Shan Med. Univ. Hosp., Taiwan, <sup>4</sup>Cent. for Education and Res. on Geriatrics and Gerontology, Chung Shan Med. Univ., Taiwan

**FT3-09 Comparative analysis of rhodophyta extra and DHA algal oil formula for (PD0702) mitigation of dry eye symptoms induced by UVB irradiation in a mouse model**

16:10

Tsung-Han Lu<sup>1</sup>, Ying-Chih Tung<sup>2</sup>, Chia-Yun Hsu<sup>1</sup>, Meng-Tien, Hsieh<sup>1</sup>, Ya-Jing Liu<sup>1</sup>, Han Hsin-Chang<sup>3</sup>, David Pei-Cheng Lin<sup>1</sup>

<sup>1</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Taiyen Biotech Co., Ltd., Taiwan, <sup>3</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan

**FT3-10 Effects of spontaneous exercise on NASH pathology in the CDAHFD-fed (PC1212) mouse model**

16:15

Yuya Kitada<sup>1</sup>, Shiori Ikeda<sup>1</sup>, Atsushi Miura<sup>1,2</sup>, Yori Ozaki-Masuzawa<sup>2</sup>, Takashi Hosono<sup>1,2</sup>, Taiichiro Seki<sup>1,2</sup>

<sup>1</sup>Dept. of Appl. Life Sci., Grad. Sch. of Bioresour. Sci., Nihon Univ., Japan, <sup>2</sup>Dept. of Chem. and Life Sci., Coll. of Bioresour. Sci., Nihon Univ., Japan

**FT3-11 Fish oil ameliorates cognitive impairment by suppressing hippocampal (PC0607) inflammation and amyloid- $\beta$  deposition**

16:20

Sachiko Okue<sup>1</sup>, Mai Takahashi<sup>2</sup>, Riku Orihara<sup>2</sup>, Eimi Ishikawa<sup>2</sup>, Ayako Ueno<sup>2</sup>, Takashi Saito<sup>3</sup>, Takaomi C. Saido<sup>3</sup>, Yori Ozaki-Masuzawa<sup>2</sup>, Takashi Hosono<sup>1,2</sup>, Taiichiro Seki<sup>1,2</sup>

<sup>1</sup>Dept. of Appl. Life Sci., Grad. Sch. of Bioresour. Sci., Nihon Univ., Japan, <sup>2</sup>Dept. of Chem. and Life Sci., Coll. of Bioresour. Sci., Nihon Univ., Japan, <sup>3</sup>RIKEN Cent. for Brain Sci., Japan

**FT3-12 The effect of Tetrahydrocurcumin inhibits TNF-alpha induced insulin (PC1309) resistant**

16:25

Yi-Zhen Tsai<sup>1</sup>, Chi-Tang Ho<sup>2</sup>, Min-Hsiung Pan<sup>3</sup>, Ching-Shu Lai<sup>1</sup>

<sup>1</sup>Dept. of Sea. Sci., Nat. Kaohsiung. Univ. of Sci. and Tech., Taiwan, <sup>2</sup>Dept. of Food. Sci., Rutgers Univ., USA, <sup>3</sup>Inst. of Food. Sci. and Tech., Nat. Taiwan Univ., Taiwan

**FT3-13 Tetrahydrocurcumin suppression of DEHP promoted high fat diet induced (PC1308) nonalcoholic fatty liver disease and its molecular mechanisms of action**

16:30

Yu-Chi Chu<sup>1</sup>, Mei-Ling Tsai<sup>1</sup>, Chi-Tang Ho<sup>2</sup>, Ching-Shu Lai<sup>1</sup>

<sup>1</sup>Dept. of Sea. Sci., Nat. Kaohsiung. Univ. of Sci. and Tech., Taiwan, <sup>2</sup>Dept. of Food. Sci., Rutgers Univ., USA

**FT3-14 The effectivity of difructose anhydride III (DFA III) to increase absorption of (PC0505) calcium in rat femur bone of calcium deficient model**

16:35

Ainia Herminiati<sup>1</sup>, Rimbawan<sup>2</sup>, Budi Setiawan<sup>2</sup>, Dewi Apri Astuti<sup>3</sup>, Linar Zalinar Udin<sup>4</sup>, Sri Pudjiastuti<sup>4</sup>

<sup>1</sup>Res. Cent. for Appropriate Technol., Indonesian Inst. of Sci., Indonesia, <sup>2</sup>Dept. of Community Nutr., Fac. of Human Ecol., IPB Univ., Indonesia, <sup>3</sup>Dept. of Nutr. and Feed Technol., Fac. of Animal Sci., IPB Univ., Indonesia, <sup>4</sup>Res. Cent. for Chem., Indonesian Inst. of Sci., Indonesia

**FT3-15 Effects of polyphenol preservation liquid combined with vacuum packaging (PD0618) on the preservation of mackerel**

16:40

Yuan-de Shi, Rui Ou Yang, Zhi-hui Wang, Li-peng Li, Wen-tao Chen, Lei-wen Xiang  
Fuqing Branch, Fujian Normal Univ., China

## December 5

### Plenary Lectures 7 & 8

8:30-9:30 Room A

Chair: Yoshimasa Nakamura (Okayama Univ., Japan)

**PL7** **A novel system related to mitochondrial-leaked electrons is a target of functional food**

8:30

Pingfan Rao<sup>1</sup>, Jingke Guo<sup>1</sup>, Huaiyu Gu<sup>2</sup>, Shutao Liu<sup>3</sup>

<sup>1</sup>Coll. of Food Sci. and Biotechnol., Zhejiang Gongshang Univ., China, <sup>2</sup>Med. Sch., Sun Yat-Sen Univ., China, <sup>3</sup>Coll. of Biol. Sci. and Eng., Fuzhou Univ., China

Chair: Kaeko Murota (Shimane Univ., Japan)

**PL8** **Research and development of functional foods in Japan - History and perspectives**

9:00

Makoto Shimizu<sup>1,2</sup>

<sup>1</sup>Univ. of Tokyo, Japan, <sup>2</sup>Tokyo Univ. Agric., Japan

### Symposium 53

9:45-11:45 Room A

#### Human Studies of Functional Food Factors

**Organizers & Chairs:** Masuko Kobori (Food Res. Inst. Natl. Agric. and Food Res. Org., Japan)  
Daniel Hwang (Univ. of California, USA)

**SY53-1 Suggested mechanisms of action of dietary quercetin on cognitive function**

9:45

Masuko Kobori, Yumiko Takahashi

Food Res. Inst., Natl. Agric. and Food Res. Org., Japan

**SY53-2 A randomized, double-blind, placebo-controlled study evaluating the effects of quercetin-rich onions on cognitive function in elderly subjects**

10:00

Jun Nishihira<sup>1</sup>, Mie Nishimura<sup>1</sup>, Toshiyuki Nakagawa<sup>2</sup>, Takato Muro<sup>3</sup>, Masuko Kobori<sup>4</sup>

<sup>1</sup>Dept. of Med. Management Informatics, Hokkaido Information Univ., Japan, <sup>2</sup>Dept. of Neurobiol., Gifu Univ., Grad. Sch. of Med., Japan, <sup>3</sup>Hokkaido Agric. Res. Cent., NARO, Japan, <sup>4</sup>Food Res. Inst., NARO, Japan

**SY53-3 Alleviating effects of hericium erinaceus fermented mycelium on mild cognitive impairment**

10:25

Han-Hsin Chang<sup>1</sup>, David Pei-Cheng Lin<sup>2</sup>, Wen-Jui Chang<sup>3</sup>, Chin-Chu Chen<sup>4</sup>

<sup>1</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan, <sup>3</sup>Dept. of Ophthalmol., Landseed Intl. Hosp., Taiwan, <sup>4</sup>Biotech Res. Inst., Grape King Bio Ltd, Taiwan

**SY53-4 Clinical trials for a new, high-functional Japanese diet: focusing on natto and brown rice**

10:50

Koichi Hashimoto, Risa Araki

Dept. of Clin. and Transl. Res. Methodol., Univ. of Tsukuba, Japan



**SY53-5 Single-meal intervention study with blueberry powder and docosahexaenoic acid supplementation to assess postprandial inflammation in humans**

11:15

Daniel Hwang, Shurong Huang, Zhenzhen Mo, Liping Huang, Danielle Lemay  
Western Human Nutr. Res. Cent., ARS/USDA and Dept. of Nutr., UC Davis, USA

## Symposium 54

9:45-11:45 Room B

Co-organized by The NARO Bio-oriented Technology Research Advancement Institution

### Japanese Diets

**Organizer:** Tsuyoshi Tsuduki (Tohoku Univ., Japan)

**Chairs:** Ichiro Tsuji (Tohoku Univ., Japan)

Tsuyoshi Tsuduki (Tohoku Univ., Japan)

**SY54-1 Research on development and applying an assessment method for the Japanese dietary pattern contributing to global health**

9:45

Ichiro Tsuji

*Div. of Epidemiology, Dept. of Health Informatics & Public Health, Tohoku Univ. Grad. Sch. of Med., Japan*

**SY54-2 The development of an index score that represents the characteristics of the Japanese diet**

10:00

Shu Zhang, Yasutake Tomata, Ichiro Tsuji

*Div. of Epidemiol., Grad. Sch. of Med., Tohoku Univ., Japan*

**SY54-3 Evaluation of the health benefits of the Japanese diet**

10:22

Tsuyoshi Tsuduki

*Grad. Sch. of Agric. Sci., Tohoku Univ., Japan*

**SY54-4 Sustainable protein nutrition with Dashi/umami**

10:44

Hisayuki Uneyama

*Global Communications Dept., Ajinomoto Co., Inc., Japan*

**SY54-5 Association of diets with intestinal microbiome in Asians**

11:06

Jiro Nakayama

*Div. of Systems Bioeng., Dept. of Biosci. Biotechnol., Fac. of Agric., Grad. Sch., Kyushu Univ., Japan*

**SY54-6 Effects of a carbohydrate-restricted diet on aging in senescence-accelerated prone mice**

11:28

Chaoqi He, Qiming Wu, Tsuyoshi Tsuduki

*Grad. Sch. of Agric. Sci., Tohoku Univ., Japan*

**11:43 Closing Remarks**

**Symposium 55**

9:45-11:45 Room C

**Skeletal Muscle Health****Organizer:** Sue-Joan Chang (Natl. Cheng Kung Univ., Taiwan)**Chairs:** Sue-Joan Chang (Natl. Cheng Kung Univ., Taiwan)  
Yoshiharu Shimomura (Chubu Univ., Japan)**SY55-1 Food factors for skeletal muscle health**9:45 Sue-Joan Chang  
*Dept. of Life Sci., Natl. Cheng Kung Univ., Taiwan***SY55-2 The role of branched-chain amino acids (BCAAs) in regulation of muscle protein metabolism and physical activity**10:15 Yoshiharu Shimomura<sup>1</sup>, Yasuyuki Kitaura<sup>2</sup>  
*<sup>1</sup>Dept. of Food and Nutr. Sci., Coll. of Biosci. and Biotechnol., Chubu Univ., Japan, <sup>2</sup>Lab. of Nutr. Biochem., Grad. Sch. of Bioagric. Sci., Nagoya Univ., Japan***SY55-3 Regulation of muscle protein degradation by dietary leucine and lysine**10:45 Takashi Nagasawa<sup>1</sup>, Tomonori Sato<sup>2</sup>, Nao Muramatsu<sup>3</sup>, Yoshiaki Ito<sup>1</sup>  
*<sup>1</sup>Dept. of Biol. Chem. and Food Sci., Fac. of Agric., Iwate Univ., Japan, <sup>2</sup>Div. of Bioresour. Sci., United Grad. Sch. of Agric. Sci., Iwate Univ., Japan, <sup>3</sup>Div. of Biol. Chem. and Food Sci., Grad. Sch. of Agric. Sci. Iwate Univ., Japan***SY55-4 *Lactococcus lactis* subsp. *cremoris* FC-fermented milk intake modulates energy metabolism in mouse skeletal muscle**11:15 Wataru Aoi<sup>1</sup>, Yayoi Gotoh<sup>2</sup>, Hideki Kosaka<sup>2</sup>, Toshio Suzuki<sup>2</sup>  
*<sup>1</sup>Div. of Appl. Life Sci., Grad. Sch. of Life Environ. Sci., Kyoto Pref. Univ., Japan, <sup>2</sup>Fujicco Co., Ltd., Japan***SY55-5 Omega-3 fatty acids-enriched fish oil activates AMPK/PGC-1 $\alpha$  signaling and prevents obesity-related skeletal muscle wasting**11:30 Shing-Hwa Liu<sup>1</sup>, Chen-Yuan Chiu<sup>2</sup>, Lou-Pin Wang<sup>3</sup>, Meng-Tsan Chiang<sup>3</sup>  
*<sup>1</sup>Inst. of Toxicol., Natl. Taiwan Univ., Taiwan, <sup>2</sup>Inst. of Food Safety and Health, Natl. Taiwan Univ., Taiwan, <sup>3</sup>Dept. of Food Sci., Natl. Taiwan Ocean Univ., Taiwan***Symposium 56**

9:45-11:45 Room D

**Soy and Isoflavone Metabolites****Organizers:** Johanna W. Lampe (Fred Hutchinson Cancer Res. Cent., USA)  
Mariko Uehara (Tokyo Univ. of Agric., Japan)  
Tatsuya Moriyama (Kindai Univ., Japan)**Chairs:** Johanna W. Lampe (Fred Hutchinson Cancer Res. Cent., USA)  
Mariko Uehara (Tokyo Univ. of Agric., Japan)9:45 **Overview**

**SY56-1 Soy isoflavones and the gut microbiome: equol and O-desmethylangolensin phenotypes in relation to human health**

9:47

Johanna W. Lampe

*Div. of Public Health Sci., Fred Hutchinson Cancer Res. Cent., and Dept. of Epidemiol., Univ. of Washington, USA*

**SY56-2 Proposal as a complementary medical food material in dyslipidemia and inflammation by soybean protein and its peptide**

10:22

Mitsutaka Kohno

*Planning Dept. R & D Div., Fuji Oil Co., Ltd., Japan*

**SY56-3 The timing effect of soy protein intake on mice intestinal microbiota**

10:52

Konomi Tamura<sup>1</sup>, Hiroyuki Sasaki<sup>1,2</sup>, Kazuto Shiga<sup>1</sup>, Yuki Nakayama<sup>1</sup>, Shigenobu Shibata<sup>1</sup>

*<sup>1</sup>Lab. of Physiol. and Pharm., Sch. of Advanced Sci. and Eng., Waseda Univ., Japan, <sup>2</sup>AIST-Waseda Univ. Computational Bio Big-Data Open Innovation Lab. (CBBDOIL), Japan*

**SY56-4 Compositional and functional differences in human gut microbiome with respect to equol production and its association with blood lipid level: a cross-sectional study**

11:05

Yumei Zhang<sup>1,2</sup>

*<sup>1</sup>Dept. of Nutr. and Food Hyg., Sch. of Public Health, Peking Univ. Health Sci. Cent., China, <sup>2</sup>Beijing Key Lab. of Toxicol. Res. and Risk Assess. for Food Safety, China*

**11:40 Closing Remarks**

## Symposium 57

9:45-11:15 Room E

Sponsored by KAGOME Co., Ltd.

### Tomatoes – Health Benefits and Its Components

**Organizers:** Junji Terao (Konan Women's Univ., Japan)

Koichi Aizawa (KAGOME Co., Ltd., Japan)

**Chair:** Junji Terao (Konan Women's Univ., Japan)

**9:45 Overview**

**SY57-1 Mechanistic understanding healthy benefits of tomato and lycopene**

9:50

Xiang-Dong Wang

*J-M USDA Human Nutr. Res. Cent. on Aging at Tufts Univ., USA*

**SY57-2 Useful compounds in tomato for the management of obesity-related metabolic disorders**

10:20

Tsuyoshi Goto<sup>1,2</sup>, Haruya Takahashi<sup>1,3</sup>, Shinsuke Mohri<sup>1</sup>, Takeshi Ara<sup>1,3</sup>, Wataru Nomura<sup>1,2</sup>, Huei-Fen Jheng<sup>1</sup>, Daisuke Shibata<sup>3,4</sup>, Teruo Kawada<sup>1,2</sup>

*<sup>1</sup>Div. of Food Sci. and Biotechnol., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>Res. Unit for Physiol. Chem. C-PIER, Kyoto Univ., Japan, <sup>3</sup>KAGOME Tomato Discoveries Lab. Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>4</sup>Kazusa DNA Res. Inst., Japan*

**SY57-3 Tomato metabolome analysis for designing the functional foods**

10:40 Takeshi Ara<sup>1,2</sup>, Shingo Takahashi<sup>2</sup>, Naoko Waki<sup>2</sup>, Nozomu Sakurai<sup>3</sup>, Koichi Aizawa<sup>2</sup>, Hiroyuki Suganuma<sup>2</sup>, Yasuki Matsumura<sup>4</sup>, Teruo Kawada<sup>1,5</sup>, Daisuke Shibata<sup>2,3</sup>  
<sup>1</sup>Div. Food Sci. and Biotechnol., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>KAGOME Tomato Discoveries Lab., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>3</sup>Kazusa DNA Res. Inst., Japan, <sup>4</sup>Div. Agro. Hort. Sci., Grad. Sch. Agric., Kyoto Univ., Japan, <sup>5</sup>Res. Unit for Physiol. Chem. C-PIER, Kyoto Univ., Japan

**SY57-4 Development of foods with function claims based on the health benefits of tomato-derived nutrients**

11:00 Kazutaka Yoshida, Takuro Inoue, Koichi Aizawa  
 Innovation Div., KAGOME Co., Ltd., Japan

**11:15 Closing Remarks****Symposium 58****9:45-11:45 Room F**

Sponsored by NUTRILITE

**Phytonutrients: Living Well and Living Well Longer**

Chair: Ji Yeon Kim (Seoul Natl. Univ. of Sci. and Technol., Korea)

**SY58-1 Diet, health and longevity: Highlights from the Okinawa Centenarian Study, the Hawaii Lifespan Study and other nutrition-related studies**

9:45 Bradley J. Willcox<sup>1,2,3</sup>  
<sup>1</sup>Dept. of Geriatric Med., John A. Burns Sch. of Med., Univ. of Hawaii & Kuakini NIH, USA, <sup>2</sup>Cent. of Excellence for Clin./Transl. Aging Res., USA, <sup>3</sup>Okinawa Res. Cent. for Longevity Sci., Japan

**SY58-2 Elucidation of pharmacological action of natural medicines**

10:15 Haruki Yamada<sup>1,2,3</sup>  
<sup>1</sup>Kitasato Univ., Japan, <sup>2</sup>Dept. Pharm., Tokyo Univ. Pharm. Life. Sci, Japan, <sup>3</sup>Kitasato Res. Ctr. for Environ. Sci., Japan

**SY58-3 Rice function for disease prevention and establishment of medical rice association**

10:45 Shaw Watanabe  
 Life Sci. Promotion Found., Japan

**11:20 Panel Discussion**

## Poster Sessions

### A) Sources and Products: Fermented Foods and Beverages

#### PA0101 Co-fermentation of *Monascus purpureus* and *Saccharomyces cerevisiae* enhanced the flavor of Chinese sweet rice wine

Sheng Yin<sup>1,2,3</sup>, Yixin Che<sup>1,2,3</sup>, Wenxian Liu<sup>1,2,3</sup>, Miao Yu<sup>1,2,3</sup>

<sup>1</sup>Sch. of Food and Health, Beijing Technol. & Business Univ.(BTBU), China, <sup>2</sup>Beijing Advanced Innovation Cent. for Food Nutr. and Human Health, BTBU, China, <sup>3</sup>Beijing Eng. and Technol. Res. Cent. of Food Additives, BTBU, China

#### PA0102 Effect of the *Lactobacillus*-lemon fermented product on antioxidative activity in Clone-9 cells

Yu-Wen Huang<sup>1</sup>, Chen-Yu Xie<sup>1</sup>, Chih-Yao Hou<sup>1</sup>, Shu-Ling Hsieh<sup>1</sup>, Chih-Chung Wu<sup>2</sup>

<sup>1</sup>Dept. of Seafood Sci., Natl. Kaohsiung Univ. of Sci. and Technol., Taiwan, <sup>2</sup>Dept. of Food and Nutr., Providence Univ., Taiwan

#### PA0103 Development of Tempeh from jack bean and soybean and its functional properties as ACE (angiotensin converting enzyme) inhibitor

Andriati Ningrum, Indra Sofiana Hesti, Sri Angrahini, Widiastuti Setyaningsih

Dept. of Food Sci. and Agric. Product Technol., Fac. of Agric. Technol., Gadjah Mada Univ., Indonesia

#### PA0104 Evaluation of bioactivity of abalone visceral fermented product by lactic acid bacteria

Yushi Fujimura<sup>1</sup>, Mariko Shimura<sup>2</sup>, Naoko Hamada-Sato<sup>3</sup>

<sup>1</sup>Grad. Sch. of Safety Management of Food Supply Chain, Tokyo Univ. of Marine Sci. and Technol., Japan, <sup>2</sup>BULL-DOG SAUCE Co., Ltd., Japan, <sup>3</sup>Dept. of Food Sci. and Technol., Tokyo Univ. of Marine Sci. and Technol., Japan

#### PA0105 Novel transglycosylation products, ethyl-d-(iso)maltosides, in a traditional Japanese alcoholic beverage, sake

Yusuke Kojima<sup>1</sup>, Satomi Matsumura<sup>2</sup>, Ryo Katsuta<sup>1</sup>, Izumi Kobayashi<sup>1</sup>, Chihiro Honda<sup>1</sup>, Izumi Wagatsuma<sup>1</sup>, Hitoshi Shindo<sup>1</sup>, Masaru Hosaka<sup>1</sup>, Masafumi Tokuoka<sup>1</sup>

<sup>1</sup>Dept. of Ferment. Sci. and Tech., Grad. Sch. of Agric., Tokyo Univ. of Agric., Japan, <sup>2</sup>Dept. of Ferment. Sci., Fac. of Appl. Biosci., Tokyo Univ. of Agric., Japan

#### PA0106 Structural analysis of oligosaccharides in a traditional Japanese alcoholic beverage, sake

Chihiro Honda<sup>1</sup>, Ryo Katsuta<sup>1</sup>, Ayane Mamiya<sup>2</sup>, Nanako Okada<sup>2</sup>, Takuya Kawamura<sup>2</sup>, Mariko Yamada<sup>1</sup>, Hitoshi Shindo<sup>1</sup>, Masaru Hokasa<sup>1</sup>, Masafumi Tokuoka<sup>1</sup>

<sup>1</sup>Dept. of Ferment. Sci. and Tech., Grad. Sch. of Agric., Tokyo Univ. of Agric., Japan, <sup>2</sup>Dept. of Ferment. Sci., Fac. of Appl. Biosci., Tokyo Univ. of Agric., Japan

#### PA0107 An exopolysaccharide from *Lactobacillus plantarum* H31 in pickled cabbage inhibits pancreas $\alpha$ -amylase

Zhenghua Huang, Fuxing Lin, Xiaoyu Zhu, Mengxi Jiang, Zhaoxin Lu

Coll. of Food Sci. and Technol., Nanjing Agric. Univ., China

- PA0108 Influence on Cheddar cheese proteolysis and sensory characteristics of non-starter strain *Lactobacillus plantarum***  
Weiwai Bi<sup>1,2,4</sup>, Guixing Zhao<sup>2,3,4</sup>, Guangjin Wang<sup>2</sup>, Bixian Zhang<sup>1,2</sup>, Shuwen Lu<sup>5</sup>, Haofei Liu<sup>2</sup>, Jinrong Li<sup>2</sup>, Lei Chen<sup>2</sup>  
<sup>1</sup>Heilongjiang Academy of Agric. Sci. Post-Doctoral Station, China, <sup>2</sup>Soybean Res. Inst., Heilongjiang Academy of Agric. Sci., China, <sup>3</sup>Coll. of Food Sci. and Eng., Harbin Univ. of Commerce, China, <sup>4</sup>Grain and Corn Eng. Technol. Res. Cent., China State Administration of Grain, China, <sup>5</sup>Inst. of Food Res., Heilongjiang Academy of Agric. Sci., China
- PA0109 Effects of sake lees materials in the adipocyte differentiation gene expression**  
Yuki Motono<sup>1</sup>, Takeshi Imai<sup>2</sup>, Takafumi Iguchi<sup>3</sup>, Motoko Takaoka<sup>4</sup>  
<sup>1</sup>Dept. of Human Sci, Grad. Sch, Kobe Col., Japan, <sup>2</sup>Hyogo Pref. Inst. of Technol., Japan, <sup>3</sup>YAEAGAKI Bio-ind., Inc., Japan, <sup>4</sup>Dept. of Biosphere Sci., Kobe Col., Japan
- PA0110 Study of conditions and product development of beer brewed with djulis (*Chenopodium formosarum Koidz*) and barley malt**  
 Shih-Yu Wang, Te-Hua Liu, Meng-Chun Cheng, Tsung-Yu Tsai  
 Dept. of Food Sci., Fu Jen Cathol. Univ., Taiwan
- PA0114 Improvement in the catalytic performance of *LpPPR*, a *Lactobacillus plantarum* phenylpyruvate reductase, based on the rational design**  
Jianfang Li<sup>1</sup>, Minchen Wu<sup>2</sup>, Ting Zhang<sup>1</sup>, Bochun Hu<sup>3</sup>, Xiongfeng Xu<sup>3</sup>, Fengjiao Yuan<sup>1</sup>  
<sup>1</sup>Sch. of Food Sci. and Tech., Jiangnan Univ., China, <sup>2</sup>Wuxi Sch. of Med., Jiangnan Univ., China, <sup>3</sup>Sch. of Biotech., Jiangnan Univ., China

## A) Sources and Products: Fruits and Vegetables

- PA0201 Microwave-assisted extraction and ultrasound-assisted extraction for quantifying triterpenoid in *Momordica charantia* Linn. var. *abbreviata* Ser.**  
 Sui Qing Huang<sup>1</sup>, Yi Jou Lin<sup>2</sup>, Yu Tsung Lee<sup>2</sup>, Jen Fang Liu<sup>1,2</sup>, Li Heng Pao<sup>1</sup>, Chun-Hui Chiu<sup>1,3</sup>  
<sup>1</sup>Grad. Inst. of Health Ind. and Technol., Chang Gung Univ. of Sci. and Technol., Taiwan, <sup>2</sup>Dept. of Nutr., Chang Gung Memorial Hosp., Taiwan, <sup>3</sup>Dept. of Traditional Chinese Med., Chang Gung Memorial Hosp., Taiwan
- PA0202 Analysis of the aroma components of Niigata edible chrysanthemums *Chigusa Tateyama***<sup>1</sup>, Kiharu Igarashi<sup>2</sup>  
<sup>1</sup>Fac. of Human Life Studies, Univ. of Niigata Prefecture, Japan, <sup>2</sup>Fac. of Agric., Yamagata Univ., Japan
- PA0203 Deterioration inhibitory effect on citrus fruit flavor by the functional ingredient included in immature persimmon “Tekka-kaki”**  
Natsumi Ohnishi<sup>1</sup>, Mizusa Wada<sup>1</sup>, Miho Inoue<sup>1</sup>, Yoshiyuki Watanabe<sup>2</sup>, Kenich Kanno<sup>3</sup>, Akiyoshi Sawabe<sup>1</sup>  
<sup>1</sup>Dept. of Appl. Biological Chem., Fac. of Agric., Kindai Univ., Japan, <sup>2</sup>Dept. of Biotechnol. and Chem., Fac. of Eng., Kindai Univ., Japan, <sup>3</sup>Dept. of Biol. and Environ. Chem., Kindai Univ., Japan

- PA0204 Changes in amounts of quercetin and monosaccharides in onion bulb during dry by a characteristic hanging method in Awaji Island**  
Ko Kanazawa<sup>1</sup>, Fumika Himoto<sup>1</sup>, Hiroyuki Okui<sup>2</sup>  
<sup>1</sup>Dept. of Brewing., Fac. of Agric., Kibi Intl. Univ., Japan, <sup>2</sup>Minami Awaji Agric. Improvement Guidance Cent., Awaji District Administration Office., Hyogo Prefecture Gov., Japan
- PA0206 Preparation of immobilized pectinase and clarification effects on *Physalis pubescens* L. juice**  
Ying-Hua Tian, Xiao-lan Liu  
 Coll. of Food and Biological Eng., Qiqihar Univ., China
- PA0207 Effect of controlled pre-treatments on  $\alpha$ -glucosidase inhibitory activity of wild edible vegetable (*Stenochlaena palustris*) extract**  
Della Rahmawati<sup>1</sup>, Maria DPT Gunawan Puteri<sup>1</sup>, Jevon Ardi Santoso<sup>1</sup>, Stevan Teji<sup>1</sup>, Eisuke Kato<sup>2</sup>, Yanetri Asi Nion<sup>3</sup>  
<sup>1</sup>Dept. of Food Tech., Fac. of Life Sci. and Tech., Swiss German Univ., Indonesia, <sup>2</sup>Food Biochem., Div. of Appl. Biosci., Grad. Sch. of Agri., Hokkaido Univ., Japan, <sup>3</sup>Dept. of Agronomy, Agrotech Div., Palangka Raya Univ., Indonesia
- PA0208 Anticancer, antioxidant, and  $\alpha$ -glucosidase inhibitory activity of selected Thai indigenous vegetables**  
Anuchita Moongngarm, Siriporn Lawan, Jintana Sangsopha, Sunisa Roidueng  
 Dept. of Food Tech. and Nutr. Fac. of Technol., Mahasarakham Univ., Thailand
- PA0209 Agri-food by-products as source of bioactive compounds: polyphenols and polysaccharides**  
 Mohamad Khatib<sup>1</sup>, Lorenzo Cecchi<sup>1</sup>, Enrica Bargiacchi<sup>2</sup>, Sergio Miele<sup>2</sup>, Nadia Mulinacci<sup>1</sup>  
<sup>1</sup>Dept. of Neurofarba, Nutraceutical Section, UNIFI, Italy, <sup>2</sup>Consorzio INSTM, Italy
- PA0210 Assessment of the putative healthy effect of the green noodle from banana flour and natural green colorant**  
Rujikarn Chaisanam<sup>1,3</sup>, Wattanathorn Jintanaporn<sup>2,3</sup>  
<sup>1</sup>Physiol. Dept., Grad. Sch. (Nsc Program), Fac. Med., Khon Kaen Univ., Thailand, <sup>2</sup>Physiol. Dept., Fac. Med., Khon Kaen Univ., Thailand, <sup>3</sup>Res. Inst. For HHP&HP, Khon Kaen Univ., Thailand
- PA0211 Regulatory/modulatory effect of prune essence concentrate on the intestinal function and blood lipids**  
Kamesh Venkatakrisnan, Chin-Kun Wang  
 Sch. of Nutr., Chung Shan Med. Univ., Taiwan
- PA0212 Effects of vitamin B<sub>12</sub> supplementation on vitamin C synthesis in hydroponic vegetables**  
Mahiro Seki, Yukinori Yabuta, Fumio Watanabe, Tomohiro Bito  
 Fac. of Agric., Tottori Univ., Japan

**PA0213 Chemoprevention of 1,2-dimethoxybenzoquinone isolated from *V. coignetiae* on NNK induced lung tumorigenesis in A/J mice**

Hirono Nakashima<sup>1</sup>, Kyohei Daimaru<sup>1</sup>, Kensuke Sasaki<sup>1</sup>, Yusuke Saiki<sup>1</sup>, Ryoko Hida<sup>1</sup>, Naoko Miyake<sup>1</sup>, Nana Fujii<sup>1</sup>, Hisao Kubo<sup>2</sup>, Katsuyuki Kiura<sup>2</sup>, Sakae Arimoto-Kobayashi<sup>1</sup>

<sup>1</sup>Div. Pharm. Sci., Grad. Sch. of Med. Den. Pharm. Sci., Okayama Univ., Japan, <sup>2</sup>Dept. of Med., Okayama Univ. Med. Sch., Japan

**PA0214 The effect of Japanese persimmon (*Diospyros kaki*) extract on the prevention of sarcopenia**

Nayla M. Alfarafisa<sup>1</sup>, Kohji Kitaguchi<sup>1,2</sup>, Tomio Yabe<sup>1,2,3</sup>

<sup>1</sup>United Grad. Sch. of Agric. Sci., Gifu Univ., Japan, <sup>2</sup>Fac. of Appl. Biol. Sci., Gifu Univ., Japan, <sup>3</sup>G-CHAIN, Japan

**PA0215 Effect of apple juice on intestinal microbiota for gastrointestinal health**

Risako Kon, Mayumi Okuma, Rei Tomimoto, Misato Toyonaga, Nahoko Mochizuki, Natsumi Fujitate, Takumi Togashi, Manami Ozaki, Nobutomoto Ikarashi, Hiroyasu Sakai, Junzo Kamei

Dept. of Biomol. Pharmacol., Hoshi Univ., Japan

**PA0216 Effect of daily intake of the High-Lycopene Tomato, a variety named “PR-7”, on lipid metabolism: a randomized, double-blind, placebo-controlled study**

Mie Nishimura<sup>1</sup>, Naoki Tominaga<sup>2</sup>, Kouji Satoh<sup>1</sup>, Yuko Ishikawa-Takano<sup>3</sup>, Mari Maeda-Yamamoto<sup>4</sup>, Jun Nishihira<sup>1</sup>

<sup>1</sup>Dept. Med. Management and Informatics, Hokkaido Information Univ., Japan, <sup>2</sup>Plant Breeding and Experiment Station, Takii & Co., Ltd., Japan, <sup>3</sup>Food Function Div., Natl. Food Res. Inst., Natl. Agric. and Food Res. Org. (NARO), Japan, <sup>4</sup>NARO, Japan

**PA0217 Metabolomics-based approach for the evaluation of different postharvest treatment in climacteric tropical fruits**

Sastia P. Putri<sup>1</sup>, Anjaritha A. R. Parijadi<sup>1</sup>, Sobir Ridwani<sup>2</sup>, Fenny M. Dwivany<sup>3</sup>, Eiichiro Fukusaki<sup>1</sup>

<sup>1</sup>Dept. of Biotech., Grad. Sch. of Eng., Osaka Univ., Japan, <sup>2</sup>Cent. of Tropical Horticultural Studies, Bogor Agric. Univ., Indonesia, <sup>3</sup>Dept. of Biotech., Sch. of Life Sci. and Tech., Institut Teknologi Bandung, Indonesia

**PA0218 Choline esters and choline in cultivated vegetables and fruits**

WenHao Wang<sup>1</sup>, Shohei Yamaguchi<sup>2</sup>, Masahiro Koyama<sup>3</sup>, Su Tian<sup>4</sup>, Aya Ino<sup>5</sup>, Koji Miyatake<sup>6</sup>, Kozo Nakamura<sup>1,7</sup>

<sup>1</sup>Dept. of Agric., Grad. Sch. of Sci. and Tech., Shinshu Univ., Japan, <sup>2</sup>Dept. of Sci. and Tech., Grad. Sch. of Med. Sci. and Tech., Shinshu Univ., Japan, <sup>3</sup>Wellnas. Co., Ltd., Japan, <sup>4</sup>Dept. of Nutr. and Food Hyg., Sch. of Public Health, Hebei Med. Univ., China, <sup>5</sup>Kochi Agric. Res. Cent., Japan, <sup>6</sup>Inst. of Vegetable and Floriculture Sci., NARO, Japan, <sup>7</sup>Inst. of Agric. Acad. Assy., Shinshu Univ., Japan



**PA0219 Consideration on the relationship between the change of raspberry cultivation condition and the amount of flavan-3-ol derivatives**

Ryo Kobori<sup>1</sup>, Seiya Hashimoto<sup>1</sup>, Takashi Kawasaki<sup>2</sup>, Akiko Saito<sup>1</sup>

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**PA0221 Antibacterial effects and the mechanisms of pterostilbene against foodborne pathogens**

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**A) Sources and Products: Herbs and Spices**

**PA0301 Anti-glycation effects of *Silybum marianum* extracts on human  $\alpha$ -crystallins**

Yen-Ju Yang<sup>1</sup>, Yi-Ping Yu<sup>2</sup>, Chun-Ping Lu<sup>1</sup>

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**PA0302 Chemical composition and antioxidant activities of nutmeg essential oil**

Rong Li<sup>1</sup>, Ying Wang<sup>1</sup>, Jin Tan<sup>1</sup>, Shu-Hua Tang<sup>1</sup>, Zi-Tao Jiang<sup>1,2</sup>

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**PA0303 *Kaempferia parviflora* extract and its polymethoxyflavonoid enhance testosterone production in mouse testis-derived tumor cells**

Satoru Horigome<sup>1,2</sup>, Misato Maeda<sup>2</sup>, Hsin-Jung Ho<sup>2</sup>, Hitoshi Shirakawa<sup>2</sup>, Michio Komai<sup>2</sup>

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**PA0304 Constituents of coriander leaves involved in antioxidant and anti-allergic activities**

Rika Ohara<sup>1</sup>, Yurika Kitamura<sup>2</sup>, Takuya Sugahara<sup>2</sup>, Hiroyuki Onda<sup>3</sup>, Nanami Yoshino<sup>3</sup>, Hiroe Kikuzaki<sup>4</sup>

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**PA0305 The potential neuroprotective effect against stroke of five Thai spice**

Thongwong Putthiwat<sup>1,3</sup>, Wattanathorn Jintanaporn<sup>2,3</sup>, Muchimapura Supaporn<sup>2,3</sup>, Thukham-mee Wipawee<sup>2,3</sup>, Wannanon Panakaporn<sup>2,3</sup>

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**PA0306 Assessment the neuroprotective potential of “TJ1”, the novel polyherbal functional drink**

Thuntiva Nakyam<sup>1,3</sup>, Jintanaporn Wattanathorn<sup>2,3</sup>, Supaporn Muchimapura<sup>2,3</sup>, Wipawee Thukham-mee<sup>2,3</sup>, Panakaporn Wannanon<sup>2,3</sup>

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**PA0307 Study on the effect of dioscin on anxiety/depression-like behavior in ovariectomized mice**

Keisuke Watanabe, Naoki Katayama, Yukari Egashira, Shizuka Hirai

Lab. of Food Nutr., Grad. Sch. of Hort., Chiba Univ., Japan

**PA0308 Effect of *Cratoxylum formosum* ssp. *pruniflorum* extract on cell cycle and proliferation of carcinoma liver cancer cell HepG2**

Karnchanok Kaimuangpak<sup>1,2</sup>, Natthida Weerapreeyakul<sup>2,3</sup>

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**PA0309 Erucic acid-rich yellow mustard oil prevents both obesity/type 2 diabetes and low turnover osteoporosis**

Asako Takahashi, Mayu Ishizaki, Yukari Egashira, Shizuka Hirai

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**PA0310 Preparation of heat-induced semen armeniacae amarum protein nanoparticles and the encapsulation of paclitaxel**

Jianwu Zhou<sup>1</sup>, Dai Lin<sup>2</sup>, Guanzhen Gao<sup>1</sup>, Huiqin Wang<sup>1</sup>, Lijing Ke<sup>1</sup>, Pingfan Rao<sup>1</sup>

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**PA0311 Optimization of solar and mechanical drying methods to obtain the optimum flavor and bio-activities in ginger (*Zingiber officinale* L) powders**

Christofora Hanny Wijaya<sup>1,2</sup>, G. Permata Heru<sup>2</sup>, Lucia C. Soedirga<sup>2</sup>, E. Bimo Aksono<sup>3</sup>, Eko H. Purnomo<sup>1</sup>, Triyati D. Kencana W<sup>4</sup>, R.R. Fosa Sarassina<sup>5</sup>

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**A) Sources and Products: Japanese Diet****PA0401 Differences in the amount of functional components in leaf mustard (*Brassica juncea*) cooked by various methods**

Chiaki Ishikawa<sup>1</sup>, Yusuke Sawai<sup>1</sup>, Yoichi Nishiba<sup>1</sup>, Naoya Tanahara<sup>2</sup>

<sup>1</sup>Kyushu Okinawa Agric. Res. Cent., NARO, Japan, <sup>2</sup>Okinawa Pref. Agric. Res. Cent., Japan

**PA0402 Inhibition of the DNA polymerase activities of HIV-1 reverse transcriptase and HIV-1 replication by *Brasenia schreberi* (Junsai)**

Keiko Ishizuka<sup>1</sup>, Yuto Tsutsumi<sup>1</sup>, Misato Baba<sup>1</sup>, Kosaku Nishimura<sup>1,2</sup>, Keishi Hata<sup>3</sup>, Saori Takahashi<sup>3</sup>, Shozo Sakuda<sup>4</sup>, Teisuke Takita<sup>1</sup>, Kenji Kojima<sup>1</sup>, Kiyoshi Yasukawa<sup>1</sup>

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**PA0403 The effect of cooking of onion (*Allium cepa* L.) on functional ingredient levels in mice**

Jiaqing Xu, Tsuyoshi Tsuduki

Grad. Sch. of Agric. Sci., Tohoku Univ., Japan

**PA0404 Development of functional seasonings using the perilla squeezed seeds**

Takahiro Kashima<sup>1</sup>, Eri Mizutani<sup>1</sup>, Hisashi Suzuki<sup>1</sup>, Hisae Mizuguchi<sup>2</sup>, Tatsuo Shibata<sup>2</sup>

<sup>1</sup>Gifu Pref. Res. Inst. for Food Sci., Japan, <sup>2</sup>Koji-ya Shibata Haruji Shoten Co.Ltd., Japan

**PA0405 Evaluation of postprandial glycemic response and physical properties of high-amylose rice “Koshinokaori” cooked by pressure cooker**

Tomoko Yamaguchi<sup>1</sup>, Masumi Kobayashi<sup>1</sup>, Makoto Mizutani<sup>1</sup>, Shinobu Fujimura<sup>2</sup>, Yasuaki Enoki<sup>3</sup>

<sup>1</sup>Fac. of Education, Niigata Univ., Japan, <sup>2</sup>Fac. of Agric., Niigata Univ., Japan, <sup>3</sup>Bourbon Institutes of Health, BOURBON Co., Japan

**PA0406 Difference in antioxidant capacity of rice extracts among rice categories and degree of milling and processing**

Hongyan Wu, Miho Hirooka, Toshiyuki Nakamura, Shintaro Munemasa, Yoshiyuki Murata, Yoshimasa Nakamura

Grad. Sch. of Environ. Life Sci., Okayama Univ., Japan

**PA0407 Isolation, identification and biological activity of lignans from Japanese apricot**

Yuriko Ueda<sup>1</sup>, Yoshiharu Okuno<sup>1</sup>, Shiho Maehara<sup>1</sup>, Hisae Nishiyama<sup>1</sup>, Ryohei Kono<sup>2</sup>, Sachiko Nomura<sup>2</sup>, Hiroto Utsunomiya<sup>2</sup>

<sup>1</sup>Dept. of Appl. Chem. and Biochem., Natl. Inst. of Technol., Wakayama Coll., Japan, <sup>2</sup>Dept. of Strategic Surveillance for Functional Food and Comprehensive Traditional Med., Wakayama Med. Univ., Japan

**PA0408 Comprehensive dipeptide analysis in Japanese sake by LC-MS/MS**

Ushio Takeda<sup>1</sup>, Akiyoshi Hirayama<sup>2</sup>

<sup>1</sup>SCIEX, Japan, <sup>2</sup>Inst. for Advanced Biosci., Keio Univ., Japan

**A) Sources and Products: Marine Products**

**PA0501 Studies on novel bioactivity of Kombu (*Laminaria japonica*)**

Ichiro Shirasugi<sup>1</sup>, Dempo Keiji<sup>1</sup>, Yoichi Sakakibara<sup>2</sup>, Masahito Suiko<sup>2</sup>

<sup>1</sup>Kurakon Foods Co. Ltd., Japan, <sup>2</sup>Dept. of Biochem. and Appl. Biosci., Univ. of Miyazaki, Japan

- PA0502 Characteristic of yellowfin tuna skin (*T. albacares*) gelatin enriched with cinnamon and roselle powder**  
Andriati Ningrum<sup>1</sup>, Martina Widhi Hapsari<sup>1</sup>, Heli Siti Halimatul Munawaroh<sup>2</sup>  
<sup>1</sup>Dept. of Food Sci. and Agric. Product Technol., Fac. of Agric. Technol., Gadjah Mada Univ., Indonesia,  
<sup>2</sup>Dept. of Chem., Fac. of Mathematics and Sci., Indonesia Univ. of Education, Indonesia
- PA0503 Protein hydrolysates and peptides from Atlantic sea cucumber (*Cucumaria frondosa*): Antioxidant potential in food and biological systems**  
Tharindu R.L. Senadheera<sup>1</sup>, Deepika Dave<sup>1,2</sup>, Fereidoon Shahidi<sup>1</sup>  
<sup>1</sup>Dept. of Biochem., Memorial Uni. of Newfoundland, Canada, <sup>2</sup>Fisheries and Marine Inst. of Memorial Uni. of Newfoundland, Canada
- PA0504 Chlorophyll C2 uptake by Caco-2 Cells through modulation of the human ATP-binding cassette transporter family**  
Eko Susanto<sup>1,2</sup>, Fumiaki Beppu<sup>1</sup>, Masashi Hosokawa<sup>1</sup>, Kazuo Miyashita<sup>1</sup>  
<sup>1</sup>Dept. of Marine Bioresour. Chem., Grad. Sch. of Fish. Sci., Hokkaido Univ., Japan, <sup>2</sup>Dept. Fish. Prod. Tech., Fac. Fish. and Marine Sci., Diponegoro Univ., Indonesia
- PA0505 Brown alga extract reduces harmful components from particular matters through expression of aldehyde dehydrogenases in respiratory cells**  
Sang Min Cho<sup>1</sup>, Ju-Young Ko<sup>2</sup>, Min-Gyun Kim<sup>1</sup>, Ji-Hyeok Lee<sup>1</sup>, Kkonnpip Son  
<sup>1</sup>Inst. for Lee Gil Ya Cancer and Diabetes., Gachon Univ., Korea, <sup>2</sup>Dept. of Marine Life Sci., Jeju Natl. Univ., Korea
- PA0506 *Sargassum thunbergii* alga reduces harmful components from particular matters via expression of aldehyde dehydrogenases in keratinocytes**  
Ju-Young Ko<sup>1</sup>, Sang Min Cho<sup>2</sup>, Min-Gyun Kim<sup>2</sup>, Ji-Hyeok Lee<sup>2</sup>  
<sup>1</sup>Dept. of Marine Life Sci., Jeju Natl. Univ., Korea, <sup>2</sup>Inst. for Lee Gil Ya Cancer and Diabetes., Gachon Univ., Korea
- PA0507 Effects of brief bitter water treatment on *Streptococcus mutans* growth and biofilm formation**  
David Pei-Cheng Lin<sup>1</sup>, Tung-Yu Lin<sup>1</sup>, Han-Hsin Chang<sup>2</sup>  
<sup>1</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan
- PA0508 *Caulerpa lentillifera* extract, a functional ingredient and its antioxidant effect**  
Doungporn Amornlerdpison<sup>1,2</sup>, Kriangsak Mengumphan<sup>1,2</sup>  
<sup>1</sup>Fac. Fish. Tech., Maejo. Univ., Thailand, <sup>2</sup>EC. Agri. Inno. for Grad. Entrepreneur., Maejo. Univ., Thailand
- PA0509 Value added of *Caulerpa lentillifera* as antioxidant and anti-diabetic agents**  
Sittikorn Yoojam<sup>1</sup>, Narissara Lailerd<sup>2</sup>, kriangsak Mengumphan<sup>1,3</sup>, Doungporn Amornlerdpison<sup>1,3</sup>  
<sup>1</sup>Fac. Fish. Tech., Maejo. Univ., Thailand, <sup>2</sup>Dept. Physiol. Med. CMU., Thailand, <sup>3</sup>EC. Agri. Inno. for Grad. Entrepreneur., Maejo. Univ., Thailand

## A) Sources and Products: Soy and Legumes

### PA0601 A study on the physiological function of mannanotriose, an important oligosaccharide in fermented soybean product

Misaki Yamada<sup>1</sup>, Chiaki Ishikawa<sup>1,2</sup>, Yasujiro Morimitsu<sup>1</sup>

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### PA0602 Effect of germination under salinity condition on phenolic content and antioxidant capacity of selected legumes

Supap Nontasan<sup>1,2</sup>, Pheeraya Chottanom<sup>1</sup>, Anuchita Moongngarm<sup>1,2</sup>

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### PA0603 Improvement of freeze-thaw stability of oil-in-water emulsions prepared with modified soy protein isolates

Xiaodan Zang<sup>1,3</sup>, Chonghui Yue<sup>1</sup>, Mujun Liu<sup>1</sup>, Huanyu Zheng<sup>2</sup>, Xiufang Xia<sup>1</sup>, Guoping Yu<sup>1</sup>

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### PA0604 Effects of black soybean seed coat extracts on blood lipid levels in ApoE deficient mice

Wataru Tanaka<sup>1</sup>, Hiroki Matsuyama<sup>1</sup>, Daigo Yokoyama<sup>1</sup>, Yoko Yamashita<sup>2</sup>, Hitoshi Ashida<sup>2</sup>, Masanobu Sakono<sup>1</sup>, Hiroyuki Sakakibara<sup>1</sup>

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### PA0605 Effects of S-equol on pancreatic $\beta$ -cell function as incretin mimetics

Naoki Harada<sup>1</sup>, Hiroko Horiuchi<sup>1</sup>, Hiroshi Inui<sup>2</sup>, Ryoichi Yamaji<sup>1</sup>

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## A) Sources and Products: Tea, Coffee and Cocoa

### PA0701 Coffee consumption and psychological mood: the Korea nurses' health study

Hea Young Lee<sup>1</sup>, Oksoo Kim<sup>2</sup>, Jung Eun Lee<sup>3</sup>, Yanghee Pang<sup>2</sup>

<sup>1</sup>Dept. of Nursing, Doowon Tech. Univ., Korea, <sup>2</sup>Coll. of Nursing, Ewha Womans Univ., Korea, <sup>3</sup>Dept. of Food and Nutr., Seoul Natl. Univ., Korea

### PA0702 Preparation and characterization of coffee extract-loaded chitosan-tripolyphosphate nanoparticles with addition of surfactant Tween 80

Puspita Sari<sup>1</sup>, Kristina Lois<sup>1</sup>, Hilda<sup>1</sup>, Kun Tanti Dewandari<sup>2</sup>, Maria Belgis<sup>1</sup>, Mahriani<sup>3</sup>

<sup>1</sup>Dept. of Agric. Product Technol., Fac. of Agric. Technol., Univ. of Jember, Indonesia, <sup>2</sup>Dept. of Agric. Postharvest Res. and Dev., Ministry of Agric., Indonesia, <sup>3</sup>Dept. of Biol., Fac. of Math. and Nat. Sci., Univ. of Jember, Indonesia

- PA0703 Protective effects of tea seed oil from *Camellia tenuifolia* on di-(2-ethylhexyl) phthalate-induced locomotive defects in *Caenorhabditis elegans***  
Chia-Cheng Wei<sup>1,2</sup>, Shang-Wei Li<sup>2</sup>, Vivian Hsiu-Chuan Liao<sup>2</sup>  
<sup>1</sup>*Inst. of Food Safety and Health, Natl. Taiwan Univ., Taiwan*, <sup>2</sup>*Dept. of Bioenviron. Systems Eng., Natl. Taiwan Univ., Taiwan*
- PA0704 Development of lower caffeine content processing in commercialization Oolong tea**  
Wen-Chang Chang, Bi-Heng Wang, Yan-Cheng Lin, Chih Y. Lo  
*Dept. of Food Sci., Natl. Chiayi Univ., Taiwan*
- PA0705 Rooibos extract, containing eriodictyol-6-C- $\beta$ -D-glucoside as the active component, stimulate the M<sub>3</sub> muscarinic acetylcholine receptor**  
Takao Iwai<sup>1</sup>, Saori Nishimachi<sup>1</sup>, Noriyuki Monoi<sup>1</sup>, Megumi Aono<sup>1</sup>, Seiji Nakamura<sup>2</sup>  
<sup>1</sup>*Res. and Dev. Hdqrs., Lion Corp., Japan*, <sup>2</sup>*Div. of Maxillofac. Diag. and Surg. Sci., Fac. of Dent. Sci., Kyushu Univ., Japan*
- PA0706 Comparative study of bioactive compounds and antioxidant activities between Japanese green tea and roasted green tea infusion during *in vitro* gastrointestinal digestion**  
Wei Qin, Sunantha Ketnawa, Yukiharu Ogawa  
*Grad. Sch. of Hort., Chiba Univ., Japan*
- PA0707 Theaflavin induces browning in inguinal white adipose tissue**  
Nayuta Hirashima<sup>1</sup>, Kenta Suzuki<sup>1</sup>, Ryo Sukegawa<sup>1</sup>, Yasuyuki Fujii<sup>1</sup>, Ayaka Yamamoto<sup>2</sup>, Tomoya Ueno<sup>2</sup>, Naomi Osakabe<sup>1</sup>  
<sup>1</sup>*Dept. of Bio-science and Eng., Shibaura Inst. of Technol., Japan*, <sup>2</sup>*R&D Div., Yaizu Suisankagaku Ind. Co., Ltd., Japan*
- PA0708 Novel honey from tea flower (*Camellia sinensis*) as a functional food**  
Kieko Saito<sup>1,2</sup>, Yoriyuki Nakamura<sup>2</sup>  
<sup>1</sup>*Sch. of Food and Nutr. Sci., Univ. of Shizuoka, Japan*, <sup>2</sup>*Tea Sci. Cent., Univ. of Shizuoka, Japan*
- PA0709 Profile of bioactive compounds and antioxidant capacity of Indonesian cocoa powder: A case of food processing authentication**  
Besty R Ulvia<sup>1</sup>, Nuri Andarwulan<sup>1,2</sup>, Dase Hunaefi<sup>1</sup>  
<sup>1</sup>*Food Sci. and Technol., Dept., Fac. of Agric. Eng. and Technol., IPB Univ., Indonesia*, <sup>2</sup>*SEAFASST Cent., IPB Univ., Indonesia*
- PA0710 Tea consumption attenuate macrophagic foam cell formation through inhibition of the  $\alpha 9$ -nicotinic-acetylcholine receptor expression in monocytes**  
Yuan-Soon Ho<sup>1</sup>, Li-Ching Chen<sup>1</sup>, Chi-Tang Ho<sup>2</sup>  
<sup>1</sup>*Sch. of Med. Technol., Taipei Med. Univ., Taiwan*, <sup>2</sup>*Rutgers Univ., USA*

**PA0711 Bioactive incidental food nanoparticles in black tea infusion exhibiting elevated antioxidant activity**

Lijing Ke, Huan Han, Guanzhen Gao, Jianwu Zhou, Pingfan Rao

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**PA0712 Effects of polysaccharides and polyphenolics fractions of Zijuan tea (*Camellia sinensis* var. *kitamura*) on  $\alpha$ -glucose activity and blood glucose level and glucose tolerance of hyperglycaemic mice**

Dejing Chen<sup>1</sup>, Jingyuan Sun<sup>1</sup>, Weixue Dong<sup>1</sup>, Zhiming Xu<sup>2</sup>

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**A) Sources and Products: Others****PA0801 The physical properties of cooking rice**

Yukiko Kagohashi, Anon Tanaka, Shiho Takahashi

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**PA0802 Effect of glycosylation on the functional properties and conformational characteristics of oat proteins**

Hailing Wang<sup>1,2</sup>, Benyang Wu<sup>1,2</sup>, Yuande Shi<sup>1</sup>, Pingping Su<sup>1</sup>, Sheng Chen<sup>1</sup>, Shaoyun Wang<sup>3</sup>, Leiwen Xiang

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**PA0803 Comparison of protein and bioactive compounds in different germinated rice cultivars**

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**PA0804 Antioxidant activity, glycemic response and acceptance of novel tea based isotonic sport beverages**

Anoma Chandrasekara<sup>1</sup>, Shanika Schtharani<sup>2</sup>, Isuru Wijesekara<sup>2</sup>, Anudini Liyanage<sup>3</sup>, Indika Palangasinghe<sup>3</sup>, Jaanaki Goonaratne<sup>4</sup>

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**PA0805 Hydrophobic solvent extraction of glycyrrhetic acid from dried licorice root involved with size distribution and part of licorice root in sample**

Kouhei Wada, Masanao Imai

*Course of Bioresour. Utilization Sci., Grad. Sch. of Bioresour. Sci., Nihon Univ., Japan*

**PA0806 May phytochemical rich chokeberry pomace extract mitigate health hazards of processed meat?**

Laura Tamkutė<sup>1</sup>, Gintar Milašiūtė<sup>2</sup>, Ieva Sarapinienė<sup>2</sup>, Vytenis Arvydas Skeberdis<sup>2</sup>, Milda Pukalskienė<sup>1</sup>, Petras R. Venskutonis<sup>1</sup>

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**PA0807 The functional characteristics of coix seed ingredients**

Jianjun Cheng, Gaopeng Zhang, Chunlei Ni, Yangyue Ding

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**PA0808 Diet of anaogue rice increase insulin serum and TCF7L2 gene expression on rat model of type 2 diabetes mellitus**

Rumiyati<sup>1</sup>, Rizqa Salsabila Firdausia<sup>1</sup>, Gravinda Widyaswara<sup>2</sup>, Agung Endro Nugroho<sup>1</sup>, Yekti Asih Purwestri<sup>2</sup>, Yudi Pranoto<sup>3</sup>, Sri Widyastuti<sup>4</sup>, Satrijo Saloko<sup>4</sup>, Muktasam<sup>5</sup>

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**PA0809 Changes in imidazole dipeptide content of chicken meat after domestic cooking and during food manufacturing process**

Kiyoko Nagahama<sup>1</sup>, Sayaka Nishimoto<sup>2</sup>, Katsuhisa Kurogi<sup>1,2</sup>, Hidemi Hattori<sup>1,2</sup>, Yoichi Sakakibara<sup>1,2</sup>

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**PA0810 Effects of organic soil remedying fertilizer RA-I on food plants' potentials as functional food sources in Indonesia**

Indah Epriliati<sup>1,2</sup>, Indah Kuswardani<sup>1,2</sup>, Clara Christina<sup>3</sup>, Yohanes Harimurti<sup>4</sup>, Haryono<sup>5</sup>, Thomas IP Suseno<sup>1</sup>

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**PA0811 Evaluation of phenolic and flavonoid contents in young rice leaves (RD6)**

Natthida Weerapreeyakul<sup>1,2</sup>, Kawintra Tamprasit<sup>2</sup>, Khaetthareeya Sutthanut<sup>1,2</sup>, Wipawee Thukhammee<sup>2,3</sup>, Jintanaporn Wattanathorn<sup>2,3</sup>

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**PA0812 Assesment of bread crust melanoidins isolated by different ultrafiltration membranes**

Gonzalo Salazar-Mardones, M. Dolores Rivero-Pérez, Mónica Cavia-Saiz, M Luisa González-SanJose, Pilar Muñoz

*Dpet. and Food Sci., Universidad de Burgos, Spain*



- PA0813 Implementing food based dietary guidelines; field experience in Maldives**  
Roshan Delabandara<sup>1</sup>, Visakha Thilekeratne<sup>1</sup>, Anoma Chandrasekara<sup>1,2</sup>  
<sup>1</sup>Nutr. Soc. of Sri Lanka, Sri Lanka, <sup>2</sup>Wayamba Univ. of Sri Lanka, Sri Lanka
- PA0814 Cordycepin-induced unfolded protein response-dependent cell death, and AKT/MAPK-mediated drug resistance in mouse testicular tumor cells**  
 Ming-Min Chang, Bo-Syong Pan, Bu-Miin Huang  
 Dept. of Cell Biol. and Anatomy, Coll. of Med., Natl. Cheng Kung Univ., Taiwan
- PA0815 Harvesting bioactive colloidal nanoparticles in soup made from freshwater clams (*Corbicula fluminea* Muller)**  
Guanzhen Gao<sup>1,3</sup>, Lijing Ke<sup>1</sup>, Huiqin Wang<sup>1</sup>, Jianwu Zhou<sup>1</sup>, Jingjen Lin<sup>2</sup>, Bonnie Sun Pan<sup>2</sup>, Pingfan Rao<sup>1</sup>, Toshiro Matsui<sup>3</sup>  
<sup>1</sup>Food Nutr. Sci. Centre, Sch. of Food Sci. and Biotech., Zhejiang Gongshang Univ., China, <sup>2</sup>Dept. of Food Sci., Natl. Taiwan Ocean Univ., Taiwan, <sup>3</sup>Dept. of Biosci. and Biotechnol., Fac. of Agric., Grad. Sch. of Kyushu Univ., Japan
- PA0816 Fermentation characteristics of Cheonggukjang (*Bacillus* fermented soybean fermented products) by various *Bacillus subtilis* isolates**  
 Hee-Jong Yang<sup>1</sup>, Kenji Sato<sup>2</sup>, Myeong Seon Ryu<sup>1</sup>, Su-Ji Jeong<sup>1</sup>, Jiwon Seo<sup>1</sup>, Do-Youn Jeong<sup>1</sup>, Dong-Hwa Shin<sup>3</sup>  
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- PA0817 Effects of dehulled adlay instant product by extrusion on blood lipids in dyslipidemic subjects**  
 Chieh Chung, Shu-Chen Hsieh  
 Inst. of Food Sci. and Technol., Natl. Taiwan Univ., Taiwan
- PA0818 Evaluation of functional components in golden pickled cabbage during storage**  
Chieh-Yin Su, Tsai-Hua Kao  
 Dept. of Food Sci., Fu Jen Catholic Univ., Taiwan

## B) Food Factors: Amino Acids

- PB0101 L-lysine supplementation suppressed DPPIV and neprilysin expressions in the liver and kidney and increased circulating pancreatic polypeptide in rats**  
Chao-Wu Xiao, Amy Hendry, Jesse Bertinato  
 Nutr. Res. Div., Bureau of Nutr. Sci., Food Directorate, Health Products and Food Branch, Health Canada, Canada
- PB0102 Taurine regulates immune-related gene expression in macrophage-like cells**  
Midori Fukumura<sup>1</sup>, Kenji Watari<sup>1</sup>, Hideo Satsu<sup>2</sup>  
<sup>1</sup>Dept. of Biotech., Grad. Sch. of Eng., Maebashi Inst. Technol., Japan, <sup>2</sup>Dept. of Biotech., Maebashi Inst. Technol., Japan

- PB0103 Effects of long-term dietary methionine restriction on bone turnover in high-fat-fed mice**  
 Changxing Feng<sup>2</sup>, Haitao Guo<sup>2</sup>, Yanan Wang<sup>2</sup>, Jiahong Zhang<sup>2</sup>, Yonghui Shi<sup>2</sup>, Guowei Le<sup>1,2</sup>  
<sup>1</sup>State Key Lab. of Food Sci. and Technol., China, <sup>2</sup>Sch. of Sci. and Technol., Jiangnan Univ., China  
 Jiangnan Univ., China
- PB0104 The mechanism of FGF21-induced suppression of liver lipid accumulation during protein malnutrition**  
Hiroki Kosaka<sup>1</sup>, Yori Ozaki-Masuzawa<sup>2</sup>, Rino Abiru<sup>2</sup>, Keigo Kawate<sup>2</sup>, Yuki Kohno<sup>2</sup>, Atsushi Miura<sup>1,2</sup>, Morichika Konishi<sup>3</sup>, Nobuyuki Itoh<sup>4</sup>, Asako Takenaka<sup>5</sup>, Takashi Hosono<sup>1,2</sup>, Taiichiro Seki<sup>1,2</sup>  
<sup>1</sup>Dept. of Appl. Life Sci., Grad. Sch. of Bioresour. Sci., Nihon Univ., Japan, <sup>2</sup>Dept. of Chem. and Life Sci., Coll. of Bioresour. Sci., Nihon Univ., Japan, <sup>3</sup>Lab. of Microbial Chem., Kobe Pharm. Univ., Japan, <sup>4</sup>Dept. of Genetic Biochem., Kyoto Univ. Grad. Sch. of Pharm. Sci., Japan, <sup>5</sup>Dept. Agric. Chem., Sch. of Agric., Meiji Univ., Japan
- PB0105  $\gamma$ -Aminobutyric acid induces biosynthesis of a novel imidazole peptide in skeletal muscle**  
Kanako Sato<sup>1</sup>, Takeshi Arima<sup>2</sup>, Takumi Komaru<sup>3</sup>, Noriyuki Yanaka<sup>1</sup>, Mikako Sato<sup>4</sup>, Yasuyuki Oishi<sup>4</sup>, Thanachaporn Kumrungsee<sup>1</sup>  
<sup>1</sup>Grad. Sch. of Integ. Sci. for Life, Hiroshima Univ., Japan, <sup>2</sup>Grad. Sch. of Biosphere Sci., Hiroshima Univ., Japan, <sup>3</sup>Sch. of Appl. Biosci., Hiroshima Univ., Japan, <sup>4</sup>R&D Cent., NH Foods Ltd., Japan
- PB0106 Absorption and distribution and biological function of D-proline on mice**  
Aoi Miyazaki, Kenji Sato  
 Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan
- PB0107 Effects of dietary methionine restriction on cardiac function in elderly mice**  
 Le Han<sup>1,2</sup>, Guoqing Wu<sup>2</sup>, Yuncong Xu<sup>2</sup>, Yuge Jiang<sup>2</sup>, Bowen Li<sup>2</sup>, Yonghui Shi<sup>2</sup>, Guowei Le<sup>1,2</sup>  
<sup>1</sup>The State Key Lab. of Food Sci. and Technol., Jiangnan Univ., China, <sup>2</sup>Cent. for Food Nutr. and Functional Eng., Sch. of Food Sci. and Technol., Jiangnan Univ., China
- PB0108 Inhibitory effect of taurine on fatty acid/triglyceride synthesis in hypertriglyceride HepG2 cells**  
Wen Chen<sup>1,2</sup>, Yuxun Ma<sup>1</sup>, Qi Song<sup>1</sup>  
<sup>1</sup>Beijing Key Lab. of Bioactive Substances and Functional Foods, Beijing Union Univ., China, <sup>2</sup>Dept. of Food Sci, Coll. of Biochem Eng., Beijing Union Univ., China
- PB0109 Effects of roasting method on nutritional properties of sweet potato**  
Ayano Furutani<sup>1</sup>, Wataru Tanaka<sup>2</sup>, Hiroki Matsuyama<sup>2</sup>, Hayato Tajiri<sup>1</sup>, Masakatsu Takashima<sup>1</sup>, Rio Uragami<sup>1</sup>, Masanobu Sakono<sup>1,2</sup>, Hiroyuki Sakakibara<sup>1,2</sup>  
<sup>1</sup>Fac. of Agric., Univ. of Miyazaki, Japan, <sup>2</sup>Grad. Sch. of Agric., Univ. of Miyazaki, Japan

## B) Food Factors: Carbohydrates

- PB0201 Protein expression and growth medium optimization for the overexpression of a heat-stable amylosucrase in a *Bacillus* host system**  
Sunkyung Ko<sup>1</sup>, Young-Wan Kim<sup>2</sup>, Sang-Ho Yoo<sup>1</sup>  
<sup>1</sup>Dept. of Food Sci. and Biotechnol. and Carbohydr. Bioprod. Res. Cent., Sejong Univ., Korea, <sup>2</sup>Dept. of Food and Biotechnol., Korea Univ., Korea
- PB0202 *In vitro* digestibility of hyper-branched glucan particles produced by various branching enzymes**  
Jaehoon Bae, Sang-Ho Yoo  
 Dept. of Food Sci. and Biotechnol. and Carbohydr. Bioprod. Res. Cent., Sejong Univ., Korea
- PB0203 Enzymatically synthesized glycogen inhibits allergic responses in basophilic and mast cells**  
Yasukiyo Yoshioka<sup>1</sup>, Masako Inoue<sup>2</sup>, Takashi Furuyashiki<sup>3</sup>, Hitoshi Ashida<sup>2</sup>  
<sup>1</sup>Fac. of Clin. Nutr. Diet., Konan Women's Univ., Japan, <sup>2</sup>Grad. Sch. of Agric. Sci., Kobe Univ., Japan, <sup>3</sup>Inst. of Health Sci., Ezaki Glico Co., Ltd, Japan
- PB0204 Enzymatically synthesized glycogen prevents UVB damage in normal human epidermal keratinocytes**  
Yasukiyo Yoshioka<sup>1</sup>, Tomoya Kitakaze<sup>2</sup>, Takakazu Mitani<sup>2</sup>, Takashi Furuyashiki<sup>3</sup>, Hitoshi Ashida<sup>2</sup>  
<sup>1</sup>Fac. of Clin. Nutr. Diet., Konan Women's Univ., Japan, <sup>2</sup>Grad. Sch. of Agric. Sci., Kobe Univ., Japan, <sup>3</sup>Inst. of Health Sci., Ezaki Glico Co., Ltd, Japan
- PB0205 Effects of increasing dietary intake of high amylose wheat on gastrointestinal health in lean male and female mice**  
See Meng Lim<sup>1,3,4</sup>, Amanda Page<sup>2,3</sup>, Hui Li<sup>2,3</sup>, Rebecca O'Rielly<sup>2,3</sup>, John Carragher<sup>1</sup>, Iain Searle<sup>1</sup>, Sarah Robertson<sup>2</sup>, Beverly Muhlhausler<sup>1,3,5</sup>  
<sup>1</sup>Fac. of Sci., The Univ. of Adelaide, Australia, <sup>2</sup>Fac. of Health and Med. Sci., The Univ. of Adelaide, Australia, <sup>3</sup>South Australian Health and Med. Res. Inst., Australia, <sup>4</sup>Cent. for Community Health, Fac. of Health Sci., Universiti Kebangsaan Malaysia, Malaysia, <sup>5</sup>Commonwealth Sci. and Ind. Res. Organisation, Australia
- PB0206 Neural regulation of plasma adipokine levels in rats fed excessive fructose**  
Naoto Hashimoto, Manabu Wakagi, Katsunari Ippoushi, Yuko Takano-Ishikawa  
 Div. of Food Function, Food Res. Inst., NARO, Japan
- PB0207 Enhanced stability and bioactivity of curcumin by encapsulation in phyto-glycogen nanoparticles**  
Jinling Fan, Xingman Han, Pan Wang  
 Dept. of Foodsci., Sch. of Food and Bioeng., Henan Univ. of Sci. and Tech., China
- PB0208 Dietary cellulose nanofiber modulates obesity and gut microbiota in high-fat-fed mice**  
Takao Nagano<sup>1</sup>, Hiromi Yano<sup>2</sup>  
<sup>1</sup>Dept. of Food Sci., Fac. of Biores. and Envir. Sci., Ishikawa Pref. Univ., Japan, <sup>2</sup>Dept. of Health Sports Sci., Kawasaki Univ. of Med. Wel., Japan

**PB0209 Application potential of konjac oligosaccharide in functional foods for people with irregular and long time work**

Yan Zeng, Chaoyu Tian, Tong Zhang, Xuerong Xing, Yueming Zhu  
Tianjin Inst. of Industrial Biotechnol., Chinese Academy of Sci., China

**PB0211 Effects of paramylon from *Euglena gracilis* on gastric stress ulcer in rats**

Misa Ogushi<sup>1,2</sup>, Naoki Harada<sup>1</sup>, Momoko Imai<sup>3</sup>, Minako Yoshizawa<sup>4</sup>, Kengo Suzuki<sup>5</sup>, Yoshihisa Nakano<sup>1</sup>

<sup>1</sup>Dept. Life Environ. Sci., Osaka Pref. Univ., Japan, <sup>2</sup>Dept. Food Nutr., Haboromo Univ., Japan, <sup>3</sup>Dev. Clin. Nutr., Osaka Pref. Univ., Japan, <sup>4</sup>Dept. Health Nutr., Otemae Univ., Japan, <sup>5</sup>Euglena Co., Ltd., Japan

**B) Food Factors: Carotenoids**

**PB0301 Bioactivities and intestinal absorption of halocynthiaxanthin, a carotenoid from sea squirts**

Chiaki Ikeda<sup>1</sup>, Yuki Manabe<sup>1</sup>, Nami Tomonaga<sup>1</sup>, Takashi Maoka<sup>1,2</sup>, Tatsuya Sugawara<sup>1</sup>  
<sup>1</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>Div. of Food Funct. and Chem., Res. Inst. for Prod. Dev., Japan

**PB0302 Characterization and stability of 9Z- $\beta$ -carotene high-loaded nanostructured lipid carriers with higher bioaccessibility**

Cheng Yang<sup>1,2</sup>, Xin Jiang<sup>1,2</sup>, Hongxiao Yan<sup>1,2</sup>, Qingrui Sun<sup>3</sup>, Huaneng Xu<sup>1,2</sup>, Rong Tsao<sup>4</sup>, Lianfu Zhang<sup>1,2</sup>

<sup>1</sup>State Key Lab. of Food Sci. & Tech., Jiangnan Univ., China, <sup>2</sup>Sch. of Food Sci. and Tech., Jiangnan Univ., China, <sup>3</sup>Coll. of Food Sci., Heilongjiang Bayi Agri. Univ., China, <sup>4</sup>Guelph Res. and Dev. Centre, Agric. and Agri-Food Canada, Canada

**PB0303 Cognitive function improvement with astaxanthin and tocotrienols intake –A randomized, double-blind, placebo-controlled study–**

Yuki Kizawa<sup>1</sup>, Takahiro Sekikawa<sup>1</sup>, Yanmei Li<sup>2</sup>, Tsuyoshi Takara<sup>3</sup>

<sup>1</sup>BGG Japan Co., Ltd., Japan, <sup>2</sup>Beijing Gingko-Group Biol. Technol. Co., Ltd., China, <sup>3</sup>Med. Co. Seishinkai, Japan

**B) Food Factors: Lipids**

**PB0401 Precise analysis of plant sterols in human blood and search for factors related to its concentration**

Eriko Nakatsukasa, Tsuyoshi Tsuduki  
Grad. Sch. of Agric., Tohoku Univ., Japan

**PB0402 Effect of salt on the lipid absorption capacity**

Nao Hayashi, Tsuduki Tsuyoshi  
Grad. Sch. of Agric., Tohoku Univ., Japan

- PB0403 Allyl isothiocyanate induced lipid composition changes in Tet-regulated TRPA1 expressing HEK293 cells**  
Akika Nagata, Tsutomu Hashidume, Nanami Senoo, Yuko Terada, Keisuke Ito, Shinji Miura, Noriyuki Miyoshi  
*Grad. Sch. of Integrated Pharm. and Nutri. Sci., Univ. of Shizuoka, Japan*
- PB0404 A highly unsaturated diacylglycerol-enriched plastic fat for novel healthier margarine formulations**  
Ning Zhang<sup>1,2</sup>, Zun Liu<sup>1</sup>, Zhen Zhang<sup>1,2</sup>, Ying Li<sup>1,2</sup>, Yong Wang<sup>1,2</sup>  
<sup>1</sup>*Dept. of Food Sci. and Eng., Coll. of Sci. and Eng., Jinan Univ., China*, <sup>2</sup>*Guangdong Eng. Technol. Res. Cent. for Oils and Fats Biorefinery, Guangdong Eng. Technol. Res. Cent. for Cereals and Oils Byproducts Biorefinery, China*
- PB0405 Fundamental study for promoting the utilization of sunflower seed oil and strained lees made in Kagoshima, Japan**  
Haruna Kawasoe<sup>1</sup>, Saki Sato<sup>2</sup>, Yuji Minami<sup>1,2</sup>, Katsuko Kajiya<sup>1,2</sup>  
<sup>1</sup>*Grad. Sch. of Agric., Forest. and Fish., Kagoshima Univ., Japan*, <sup>2</sup>*Fac. of Agric., Kagoshima Univ., Japan*
- PB0406 Oxyphytosterols generated by ozone reaction with  $\beta$ -sitosterol**  
Igor Rodrigues Martins<sup>1</sup>, Janice Onuki<sup>2</sup>, Sayuri Miyamoto<sup>3</sup>, Miriam Uemi<sup>1</sup>  
<sup>1</sup>*Dept. of Chem., Inst. of Environ. Sci., Chem. and Pharm., Fed. Univ. of São Paulo, Brazil*, <sup>2</sup>*Lab. of Mol. Biol., Butantan Inst., Brazil*, <sup>3</sup>*Dept. of Bioch., Chem. Inst., São Paulo Univ. São Paulo Univ., Brazil*
- PB0407 New oxysterol generated by ozone reaction with cholesterol**  
Igor Rodrigues Martins<sup>1</sup>, Larissa Naomi Kanashiro<sup>1</sup>, Janice Onuki<sup>2</sup>, Miriam Uemi<sup>1</sup>  
<sup>1</sup>*Dept. of Chem., Inst. of Environ. Sci., Chem. and Pharm., Fed. Univ. of São Paulo., Brazil*, <sup>2</sup>*Lab. of Mol. Biol., Butantan Inst., Brazil*
- PB0408 Correlating trans fatty acids and key flavor compounds in youtiao using partial least squares regression analysis**  
Xuelian Yang<sup>1,2,3</sup>, Xiangyu Zhang<sup>3</sup>, Jianchun Xie<sup>1,2,3</sup>  
<sup>1</sup>*Beijing Advanced Innovation Cent. for Food Nutr. and Human Health, China*, <sup>2</sup>*Beijing Eng. and Technol. Res. Cent. of Food Additives, China*, <sup>3</sup>*Sch. of Food and Chemical Eng., Beijing Technol. and Business Univ., China*
- PB0409 The metabolic conversion of alpha-eleostearic acid to conjugated linoleic acid relates to cytochrome P450 enzymes**  
Qiming Wu, Tsuyoshi Tsuduki  
*Grad. Sch. of Agric. Sci. Tohoku Univ., Japan*
- PB0410 Health benefits of olive leaf tea for adults with pre-diabetes: An exploratory randomized controlled trial**  
Risa Araki<sup>1</sup>, Keiko Fujie<sup>1</sup>, Nanako Yuine<sup>1,2</sup>, Yuta Watabe<sup>1,2</sup>, Yoshio Nakata<sup>1</sup>, Hiroaki Suzuki<sup>3</sup>, Hiroko Isoda<sup>4</sup>, Koichi Hashimoto<sup>1</sup>  
<sup>1</sup>*Dept. of Clin. and Translational Res. Methodol., Univ. of Tsukuba, Japan*, <sup>2</sup>*Grad. Sch. of Comprehensive Human Sci., Univ. of Tsukuba, Japan*, <sup>3</sup>*Dept. of Internal Med. (Endocrinol. and Metab.), Univ. of Tsukuba, Japan*, <sup>4</sup>*Fac. of Life and Environ. Sci., Univ. of Tsukuba, Japan*

**PB0411 A new method applied in the analysis of volatile compounds of rapeseed oils: monolithic material sorptive extraction**

Qi Zhou, Xiao Jia, Yini Yang

*Oil Crops Res. Inst. of the Chinese Academy of Agric. Sci., China*

**PB0412 Digestion of dietary phospholipids and the physiological role of the digestive products in the intestine**

Kaeko Murota<sup>1,2</sup>, Shun Kumamoto<sup>2</sup>, Akane Hirano<sup>2</sup>, Nobuyuki Fukushima<sup>2</sup>, Takeshi Ohkubo<sup>3</sup>, Akira Tokumura<sup>4</sup>

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<sup>4</sup>Dept. of Pharm., Fac. of Pharm., Yasuda Women's Univ., Japan

**PB0413 Analysis of high-fat-diet-induced aggravation in postprandial lipidemia through saturated fatty acid-induced inflammation in the intestine**

Hiroyuki Tsuyama<sup>1</sup>, Mayu Kikuchi<sup>1</sup>, Manae Matsuda<sup>1</sup>, Miori Morikawa<sup>1</sup>, Rie Katsumata-Tsuboi<sup>1</sup>, Miori Tanaka<sup>1</sup>, Hirofumi Inoue<sup>1</sup>, Tsuyoshi Goto<sup>2</sup>, Teruo Kawada<sup>2</sup>, Kaeko Murota<sup>3</sup>, Mariko Uehara<sup>1</sup>, Noubuyuki Takahashi<sup>1</sup>

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**PB0414 The effect of fatty acids on the oxidative stress exposure in vascular endothelial cells**

Fumika Nakano, Tsuyoshi Tsuduki

*Grad. Sch. of Agric. Sci., Tohoku Univ., Japan*

**PB0415 Effect of eicosapentaenoic-enriched phospholipids on basal and pro-inflammatory cytokines-induced lipolysis in 3T3-L1 adipocytes**

Lei Du<sup>1</sup>, Yuhong Yang<sup>2</sup>, Koretaro Takahashi<sup>3</sup>

<sup>1</sup>Dept. of Nutr. and Food Hyg., Sch. of Public Health, Shandong Univ., China, <sup>2</sup>Sch. of Food Sci. and Eng., Qilu Univ. of Technol., China, <sup>3</sup>Fac. of Eng., Kitami Inst. of Technol., Japan

**PB0416 Improved bioaccessibility and hydrolysis of lipid emulsions in crowded medium**

Zhongxiu Chen

*Mol. Food Sci. Lab., Coll. of Food and Biol. Eng., Zhejiang Gongshang Univ., China*

**PB0417 Omega 9-enriched crocodile oil and its insulin sensitivity**

Metas Ngernjan<sup>1</sup>, Narissara Lailerd<sup>2</sup>, Kriangsak Mengumphan<sup>1,3</sup>, Doungporn Amornlerdpison<sup>1,3</sup>

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**PB0418 Freshwater fish oil from catfish on anti-hyperglycemic and anti-hyperlipidemic effects in obese rats**

Kriangsak Mengumphan<sup>1,2</sup>, Supaporn Sattang<sup>1</sup>, Narissara Lailerd<sup>3</sup>, Doungporn Amornlerdpison<sup>1,2</sup>

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**B) Food Factors: Minerals**

**PB0501 A solubility-based separation of group B soyasaponins with zinc transporter protein (ZIP4)-enhancement activity from whole soybean flour**

Masakazu Takahashi<sup>1</sup>, Keitaro Kaneda<sup>1</sup>, Fuka Okawa<sup>1</sup>, Haruna Yamauchi<sup>1</sup>, Taiho Kambe<sup>2</sup>, Hajime Katano<sup>1</sup>

<sup>1</sup>Dept. of Biosci., Fukui Pref. Univ., Japan, <sup>2</sup>Div. of Int. Life Sci., Grad. Sch. of Biostudies, Kyoto Univ., Japan

**PB0502 Analysis of ESR spectra in different parts of mushrooms and their hydroxyl radical scavenging activities**

Tomomi Kanno<sup>1</sup>, Shigeaki Nakazawa<sup>2</sup>, Etsuko Harada<sup>3</sup>, Hiroki Okumura<sup>4</sup>, Yoshiaki Miyake<sup>1</sup>, Kazunobu Sato<sup>2</sup>, Takeji Takui<sup>2</sup>, Toshihiko Osawa<sup>5</sup>

<sup>1</sup>Dept. of Health and Nutr. Sci., Fac. of Health and Med. Sci., Aichi Shukutoku Univ., Japan, <sup>2</sup>Dept. of Chem. and Mol. Materials Sci., Grad. Sch. of Sci., Osaka City Univ., Japan, <sup>3</sup>Dept. of Forest and Envir. Sci., Fac. of Agric., Miyazaki Univ., Japan, <sup>4</sup>Dept. of Life Sci., Grad. Sch. of Agric., Meijo Univ., Japan, <sup>5</sup>Dept of Health and Nutr., Fac. of Psych. and Phys. Sci., Aichi Gakuin Univ., Japan

**PB0503 Effect of soluble dietary fiber on plasma phosphorus and endothelial function**

Sarasa Tanaka<sup>1,2</sup>, Mariko Tani<sup>1</sup>, Hiromi Kawamura<sup>1</sup>, Shiori Sakaue<sup>2</sup>, Mayu Matsui<sup>2</sup>, Midori Ishitani<sup>1</sup>, Motoyoshi Sakaue<sup>1,2</sup>, Mikiko Ito<sup>1,2</sup>

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**B) Food Factors: Peptides and Proteins**

**PB0601 Comparative experiments of fibril formation from whey protein concentrate with homogeneous and secondary nuclei**

Hong-Hua Xu, Mei-Li Shao, Fei Teng, Jun-Yan Tan, Guo-Ping Yu, Xiu-Ling Zhang  
Key Lab. of Dairy Sci., Ministry of Education, Northeast Agric. Univ., China

**PB0602 Nutritional constituents of spirulina (*Arthrospira platensis*) and the nitrogen balance in spirulina-fed rat**

Yudai Shioji<sup>1,2</sup>, Takuya Yoshida<sup>2</sup>, Tatsuya Sasada<sup>1</sup>, Noriyuki Miyoshi<sup>2</sup>

<sup>1</sup>Kakegawa Biocenter of VUTEQ Co., Japan, <sup>2</sup>Grad. Sch. of Integrated Pharm. and Nutr. Sci., Univ. of Shizuoka, Japan

**PB0603 Purification of a novel anti-angiotensin converting enzyme inhibitory peptides from neutrase hydrolysate of flounder fish muscle**

Ju-Young Ko<sup>1</sup>, Ji-Hyeok Lee<sup>2</sup>

<sup>1</sup>Dept. of Marine Life Sci., Jeju Natl. Univ., Korea, <sup>2</sup>Inst. for Lee Gil Ya Cancer and Diabetes., Gachon Univ., Korea

**PB0604 Daily intake of pyroglutamyl peptides-rich fermented rice drink changed gut microbiota who have particular pattern of microbiota in healthy volunteers**

Sayori Wada<sup>1</sup>, Mayuko Kotani<sup>1</sup>, Chihiro Itoh<sup>1</sup>, Toko Kasuno<sup>1</sup>, Hirokazu Taniguchi<sup>1</sup>, Kenji Sato<sup>2</sup>, Akane Higashi<sup>1</sup>, Yuji Naito<sup>3</sup>

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**PB0605 Pro-Hyp is specifically incorporated in fibroblast expressing p75NTR**

Kazuhiro Sawada<sup>1</sup>, Kazunobu Yoshikawa<sup>1</sup>, Tomoko Asai<sup>2</sup>, Kenji Sato<sup>1</sup>

<sup>1</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>Dept. of Food Sci. and Nutr., Fac. of Human Life and Env. Sci., Nara Women's Univ., Japan

**PB0606 Screening of various peptide sequences of food proteins for their potential as prolyl endopeptidase inhibitors**

Chia-Ling Jao<sup>1</sup>, Ping-Jung Liu<sup>2</sup>, Kuo-Chiang Hsu<sup>2</sup>

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**PB0607 Albumin extracted from rice bran is resistant to digestion and adsorbs glucose**

Chiaki Sugimoto<sup>1</sup>, Aya Hamada<sup>1</sup>, Shigenobu Ina<sup>1</sup>, Yusuke Yamaguchi<sup>1</sup>, Hitoshi Kumagai<sup>2</sup>, Hitomi Kumagai<sup>1</sup>

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**PB0608 Effect of HCl-treated wheat protein on antigen-presenting cells**

Hayato Kobayashi, Ryosuke Abe, Narumi Matsukaze, Yusuke Yamaguchi, Hitomi Kumagai

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**PB0609 The novel plant derived supplement containing the protein hydrolysate "JPS" enhances functional recovery of spinal cord injury**

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**PB0610 Liver hydrolysate improves depressive-like behavior in olfactory bulbectomized mice: involvement of hippocampal neurogenesis through AMPK/BDNF/CREB pathway**

Kotaro Yamada<sup>1</sup>, Osamu Nakagawasai<sup>2</sup>, Takayo Odaira<sup>2</sup>, Kohei Takahashi<sup>2,3</sup>, Wataru Nemoto<sup>2</sup>, Wakana Sakuma<sup>2</sup>, Jia-Rong Lin<sup>2</sup>, Hidetomo Sakurai<sup>1</sup>, Koichi Tan-no<sup>2</sup>

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**PB0611 Flaxseed proteome as precursors of antioxidant peptides: an *in silico* study**Dawei Ji<sup>1</sup>, Chibuike C. Udenigwe<sup>2,3</sup>, Dominic Agyei<sup>1,2</sup><sup>1</sup>Dept. of Food Sci., Univ. of Otago, New Zealand, <sup>2</sup>Sch. of Nutr. Sci., Univ. of Ottawa, Canada, <sup>3</sup>Dept. of Chem and Biomol. Sci., Univ. of Ottawa, Canada**PB0612 Dipeptides can transport across the blood-brain barrier in mouse brain**Hayato Kiyohara<sup>1</sup>, Mitsuru Tanaka<sup>1</sup>, Shinya Dohgu<sup>2</sup>, Genki Komabayashi<sup>1</sup>, Fuyuko Takata<sup>2</sup>, Yasufumi Kataoka<sup>2</sup>, Takashi Nirasawa<sup>3</sup>, Toshiro Matsui<sup>1</sup><sup>1</sup>Div. of Biores. and Bioenviron. Sci., Grad. Sch. of Agric. Sci., Kyushu Univ., Japan, <sup>2</sup>Div. of Pharm. Care and Health Sci., Fukuoka Univ., Japan, <sup>3</sup>Bruker Japan K.K., Japan**PB0613 Generation of Pro-Hyp and p75NTR- positive cell in cultured skin**Xin Wei<sup>1</sup>, Shiro Jimi<sup>2</sup>, Kazunobu Yoshikawa<sup>3</sup>, Tomoko Asai<sup>4</sup>, Kenji Sato<sup>1</sup><sup>1</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>Cent. Lab. for Pathol. and Morphol., Fac. of Med., Fukuoka Univ., Japan, <sup>3</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>4</sup>Dept. of Food Sci. and Nutr., Fac. of Human Life and Environ. Sci., Nara Women's Univ., Japan**PB0614 Dipeptidyl peptidase IV inhibitory activities of bonito dashi in human**Eiji Seki<sup>1</sup>, Yoshifumi Fujiwara<sup>1</sup>, Junko Suzuki<sup>2</sup>, Takuya Yamane<sup>3</sup>, Hideo Satsu<sup>4</sup>, Iwao Ohkubo<sup>5</sup><sup>1</sup>Katuobushi Dashi Lab., Yamaki Co., Ltd., Japan, <sup>2</sup>Dept. of Nutr. Sch. of Nursing and Nutr., Tenshi Col., Japan, <sup>3</sup>Grad Sch. of Life and Environ. Sci., Osaka Pref. Univ., Japan, <sup>4</sup>Dept. of Biotech., Maebashi Inst. of Technol., Japan, <sup>5</sup>Mikasa City Hosp., Japan**PB0615 Antioxidant properties and myogenic differentiation of protein hydrolysates in soybean and mealworm (*Tenebrio Molitor*) larvae**Yang Hou, Xiaotong Yu, Yookyung Kim

Dept. of Human Ecology, Grad. Sch., Korea Univ., Korea

**PB0616 Characterization and functional properties of gelatin extracted from chinese giant salamander (*Andrias davidianus*) skin**Wen-gang Jin<sup>1</sup>, Jinjin Pei<sup>1</sup>, Yi-nan Du<sup>2</sup>, Jingfeng Pan<sup>2</sup>, Ruichang Gao<sup>3</sup>, Haitao Wu<sup>2</sup><sup>1</sup>Bio-resources Key Lab. of Shaanxi Province, Sch. of Biol. Sci. and Eng., Shaanxi Univ. of Technol., China, <sup>2</sup>Natl. Eng. Res. Cent. for Seafood, Sch. of Food Sci. and Technol., Dalian Polytech. Univ., China, <sup>3</sup>Coll. of Food and Biol. Technol., Jiangsu Univ., China**PB0617 Novel ghrelin-releasing peptide derived from wheat protein**Kana Tanikawa<sup>1</sup>, Shimon Abe<sup>1</sup>, Hiroshi Iwakura<sup>2</sup>, Masaru Sato<sup>3</sup>, Atsushi Kurabayashi<sup>3</sup>, Hideyuki Suzuki<sup>3</sup>, Miki Makita<sup>4</sup>, Hiroyuki Ikemoto<sup>4</sup>, Shigenobu Matsumura<sup>1</sup>, Kazuo Inoue<sup>1</sup>, Kousaku Ohinata<sup>1</sup><sup>1</sup>Div. of Food Sci. and Biotechnol., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>The First Dept. of Med., Wakayama Med. Univ., Japan, <sup>3</sup>Dept. of Appl. Genomics, Kazusa DNA Res. Inst., Japan, <sup>4</sup>Health Care Res. Cent., Nisshin Pharma Inc, Japan**PB0619 Study on the structure of oligopeptides with beauty effect in industrial-scale produced rice protein hydrolysate**Yuqing Wang

China Natl. Res. Inst. of Food and Fermentation Ind., China

**PB0620 Study on the structure of oligopeptides with the function of improving athletic ability in industrial-scale produced corn gluten meal hydrolysate**

Liang Chen

*China Natl. Res. Inst. of Food and Fermentation Ind., China*

**B) Food Factors: Polyphenols and Antioxidants**

**PB0701 The beneficial effects of pomegranate polyphenols in regulating lipid metabolism**

Jianke Li, Chen Hou

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**PB0702 Effect of wine pomace product on IFN- $\gamma$  and TNF- $\alpha$  inflammation and tumor invasion on endothelial cells**

Pilar Muñiz, Gisela Gerardi, Monica Cavia-Saiz, M. D. Rivero-Pérez, Gonzalo Salazar-Mardones, M. Luisa Gonzalez-SanJose

*Dept. of Biotechnol. and Food Sci. Universidad de Burgos., Spain*

**PB0703 Gallic acid suppresses hepatic steatosis, apoptosis, and inflammation caused by the interaction with macrophages**

Miori Tanaka<sup>1,2</sup>, Akari Sato<sup>1</sup>, Yoshimi Kishimoto<sup>3</sup>, Hideaki Mabashi-Asazuma<sup>1,4</sup>, Kazuo Kondo<sup>3,5</sup>, Kaoruko Iida<sup>1,4</sup>

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**PB0704 Search and analysis of food components regulating urate transporter ABCG2**

Yasuhiro Enomoto<sup>1</sup>, Taishi Kondo<sup>2</sup>, Yu Toyoda<sup>3</sup>, Hiroshi Suzuki<sup>3</sup>, Tappei Takada<sup>3</sup>, Atsuyoshi Nishina<sup>4</sup>, Hideo Satsu<sup>2</sup>

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**PB0705 The antioxidant activity of epigallocatechin gallate (EGCG) esters in lipidic systems**

Han Peng, Fereidoon Shahidi

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**PB0706 The nutritional compositions and antioxidant activities of bee pollen collected in various areas of Korea**

Gil-Ran Lee<sup>1,2</sup>, Mok-Ryeon Ahn<sup>1,2</sup>

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- PB0707 Screening of compounds that inhibit the interaction between curcumin and bovine serum albumin to improve the physiological activity of curcumin**  
Mayuko Itaya<sup>1</sup>, Taiki Miyazawa<sup>2</sup>, Takahiro Eitsuka<sup>1</sup>, Atsushi Imaizumi<sup>3</sup>, Kiyotaka Nakagawa<sup>1</sup>  
<sup>1</sup>Dept. of Biosci. Biotech. for Futr. Bioind., Grad. Sch. of Agric. Sci., Tohoku Univ., Japan, <sup>2</sup>Inst. of Biomater. Bioeng., Tokyo Med. Dent. Univ., Japan, <sup>3</sup>Therabiopharma Inc., Japan
- PB0708 Antioxidant capacity of deep-fried products prepared using millet flour batter**  
Asuka Taniguchi<sup>1</sup>, Nami Kyogoku<sup>2</sup>, Rie Kobayashi<sup>1</sup>  
<sup>1</sup>Grad. Sch. of Humanities and Life Sci., Tokyo Kasei Univ., Japan, <sup>2</sup>Dept. of Food and Nutr., Kanazawa Gakuin Coll., Japan
- PB0709 Studies on the polyphenols bioaccessibility and antioxidant activity during simulated in vitro digestion of Japanese pickled plums**  
Jutalak Suwannachot, Sunantha Ketnawa, Yukiharu Ogawa  
Grad. Sch. of Hort., Chiba Univ., Japan
- PB0710 The distinguishable absorption and metabolism of quercetin coexisted with other food components**  
Rikito Mitsuzane<sup>1</sup>, Toshiyuki Nakamura<sup>1</sup>, Shintaro Munemasa<sup>1</sup>, Yoshiyuki Murata<sup>1</sup>, Yoshimasa Nakamura<sup>1</sup>  
Grad. Sch. of Environ. Life. Sci., Okayama Univ., Japan
- PB0711 Evaluation of the antioxidant activity of *Petasites japonicus* Maxim. flower bud extracts**  
Miki Hiemori-Kondo<sup>1,2</sup>, Daisuke Shinya<sup>2</sup>, Mika Nii<sup>3</sup>  
<sup>1</sup>Dept. of Food Nutr. Sci., Tokushima Bunri Univ., Japan, <sup>2</sup>Dept. of Food Nutr. Sci., Grad. Sch. of Human Life Sci., Tokushima Bunri Univ., Japan, <sup>3</sup>Dept. of Resour. Environ. Res., TAFF TSC, Japan
- PB0712 Phenyl ethanoid glycosides from *Lantana montevidensis* and their antioxidant and cell antiproliferative activity**  
Yoshiharu Okuno, Keiji Yamasaki  
Dept. of Appl. Chem. and Biochem., Natl. Inst. of Technol., Wakayama Coll., Japan
- PB0713 Antioxidant activity and polyphenols in main woody plant leaves growing forest floor in beech coppice in Uonuma, Niigata**  
Tomoko Yamaguchi<sup>1</sup>, Chika Nakashima<sup>1</sup>, Keigo Mikame<sup>2</sup>, Tomohiko Kamitani<sup>2</sup>  
<sup>1</sup>Fac. of Edu., Niigata Univ., JPN, <sup>2</sup>Fac. of Agric., Niigata Univ., JPN
- PB0714 Change of microwave-cooked pigmented rice structure and antioxidant phytochemicals before and during in vitro digestion**  
Sukanya Thuengtung, Yukiharu Ogawa  
Grad. Sch. of Hort., Chiba Univ., Japan

**PB0715 Analysis of the cytotoxic mechanisms of sulforaphane**Seiya Nishiba<sup>1</sup>, Shigeki Takeda<sup>1</sup>, Noritaka Adachi<sup>2</sup>, Aya Kurosawa<sup>1,2,3</sup><sup>1</sup>Div. of Mol. Sci., Grad. Sch. of Sci. Tech., Gunma Univ., Japan, <sup>2</sup>Grad. Sch. of Nanobiosci., Yokohama City Univ., Japan, <sup>3</sup>Cent. Food Sci. Wellness, Gunma Univ., Japan**PB0716 The effects of resveratrol and piceid on macrophage efferocytosis**Naomi Abe-Kanoh<sup>1</sup>, Yuki Hashimoto<sup>2</sup>, Haruka Yamamoto<sup>2</sup>, Miyuki Uemura<sup>2</sup><sup>1</sup>Inst. of Biomed. Sci., Tokushima Univ. Grad. Sch., Japan, <sup>2</sup>Sch. of Med. Nutr., Tokushima Univ., Japan**PB0717 Evaluation of the preventive effect of glucosyl-hesperidin on adenine-induced kidney injury by using *in vivo* Saa3-promoter bioluminescence imaging**Kotaro Hashimoto<sup>1</sup>, Taishi Kariya<sup>1</sup>, Nao Yazawa<sup>1</sup>, Yohei Sanada<sup>1</sup>, Takayuki Koyano<sup>2</sup>, Takao Hashimoto<sup>1</sup>, Makoto Matsuyama<sup>2</sup>, Thanutchaporn Kumrungsee<sup>1</sup>, Fons AJ van de Loo<sup>3</sup>, Noriyuki Yanaka<sup>1</sup><sup>1</sup>Grad. Sch. of Integrated Sci. for Life, Hiroshima Univ., Japan, <sup>2</sup>Div. of Mol. Genetics, Shigei Med. Res. Inst., Japan, <sup>3</sup>Dept. of Rheumatol., Radboud Univ. Med. Cent., The Netherlands**PB0718 Effect of matcha green tea on endoplasmic reticulum stress in monocytic cells**Yoshimi Kishimoto<sup>1</sup>, Ikue Takeuchi<sup>2</sup>, Tomomi Iwashima<sup>3</sup>, Chie Taguchi<sup>1</sup>, Kazuo Kondo<sup>1,2</sup><sup>1</sup>Endowed Res. Dept. 'Food for Health', Ochanomizu Univ., Japan, <sup>2</sup>Grad. Sch. of Food Nutr. Sci., Toyo Univ., Japan, <sup>3</sup>Dept. of Food Nutr. Sci., Grad. Sch. of Humanities and Sci., Ochanomizu Univ., Japan**PB0719 Bioactive properties of saba banana and their changes during simulated *in vitro* digestion process**Florencio. C. Reginio Jr.<sup>1,2</sup>, Wei Qin<sup>1</sup>, Sunantha Ketnawa<sup>1</sup>, Yukiharu Ogawa<sup>1</sup><sup>1</sup>Dept. of Environ. Sci. for Bioprod., Grad. Sch. of Hortic., Chiba Univ., Japan, <sup>2</sup>Inst. of Food Sci. and Technol., Coll. of Agric. and Food Sci., Univ. of the Phil., Philippines**PB0720 Riceberry bran oil ameliorates oxidative stress and hepatotoxicity induced by acetaminophen overdose in mice**Rawiwan Wongpoomchai<sup>1,2</sup>, Warunyoo Phannasorn<sup>1</sup>, Napaporn Khuaphram<sup>1</sup>, Suphachai Charoensin<sup>3</sup><sup>1</sup>Dept. of Biochem., Fac. Med., Chiang Mai Univ., Thailand, <sup>2</sup>Func. Food Res. Cen. for Well-Being, Chiang Mai Univ., Thailand, <sup>3</sup>Div. Nutr., Sch. Med Sci, Univ. Phayao, Thailand**PB0721 Green tea polyphenol EGCG enhances anticoagulation factor TFPI expression by activating 67LR signaling**Ren Yoshitomi, Hirokatsu Kanzaki, Takuya Takakura, Shigeyuki Totoki, Motofumi Kumazoe, Yoshinori Fujimura, Hirofumi Tachibana

Div. of Appl. Biol. Chem., Grad. Sch. of Bioresour. and Bioenviron. Sci., Kyushu Univ., Japan

**PB0722 Black garlic extract suppresses oxidation of low-density lipoprotein**Hirofumi Arai<sup>1</sup>, Akari Yasunaga<sup>1,2</sup>, Daishi Yahagi<sup>2</sup>, Shunichi Yasutake<sup>2</sup>, Ryota Hosomi<sup>3</sup>, Kenji Fukunaga<sup>3</sup>, Mikako Takasugi<sup>4</sup><sup>1</sup>Dept. of Biotechnol. and Environ. Chem., Kitami Inst. of Technol., Japan, <sup>2</sup>Nihon Seiyaku Kogyo Co. Ltd., Japan, <sup>3</sup>Fac. of Chem., Materials and Bioeng., Kansai Univ., Japan, <sup>4</sup>Dept. of Life Sci., Kyushu Sangyo Univ., Japan

- PB0723 Apigenin and luteolin display differential hypocholesterolemic mechanisms in mice fed a high-fat diet**  
Tsz Yan Wong<sup>1</sup>, Yan Qin Tan<sup>1</sup>, Shu-mei Lin<sup>2</sup>, Lai K. Leung<sup>1</sup>  
<sup>1</sup>Food and Nutr. Sci. Programme, Sch. of Life Sci., The Chinese Univ. of Hong Kong, Hong Kong, <sup>2</sup>Dept. of Food Sci., Natl. Chiayi Univ., Taiwan
- PB0724 Dose reduction of the  $\alpha$ -glucosidase inhibitor acarbose by xanthenes from *Cyclopia genistoides*—enhanced nutraceutical potential through synergism**  
Neil Miller<sup>1,2</sup>, Christiaan Malherbe<sup>1</sup>, Elizabeth Joubert<sup>1,2</sup>  
<sup>1</sup>Plant Bioactives Group, Agric. Res. Council (ARC), South Africa, <sup>2</sup>Dept. of Food Sci., Stellenbosch Univ., South Africa
- PB0725 Eugenol ameliorates 2 diabetes mellitus in mice via activation on muscle glucose uptake through TRPV1/AMPK/GLUT4**  
Yuge Jiang<sup>1,2</sup>, Qiuli Gao<sup>2</sup>, Yuncong Xu<sup>2</sup>, Bowen Li<sup>2</sup>, Yonghui Shi<sup>1,2</sup>, Guowei Le<sup>1,2</sup>  
<sup>1</sup>The State Key Lab. of Food Sci. and Technol., Jiangnan Univ., China, <sup>2</sup>Sch. of Food Sci. and Tech. Jiangnan Univ., China
- PB0726 *In vitro* antioxidant and anti-inflammatory ability of lignin molecules from the sclereids of *Psidium guajava* fruits by NaOH extraction**  
Chia-En Li, Zwe-Ling Kong  
Dept. of Food Sci., Natl. Taiwan Ocean Univ., Taiwan
- PB0727 Solvent extraction and discrimination of Kyoho skin, seed, and flesh antioxidant activities: An unsupervised case study using advanced chemometrics**  
Kandi Sridhar, Albert Linton Charles  
Dept. of Tropical Agric. and Intl. Cooperation, Natl. Pingtung Univ. of Sci. and Technol., Taiwan
- PB0728 Color stability of anthocyanin extract from wastewater of purple sweet potato starch processing**  
Elisa Julianti, Ridwansyah, Era Yusraini  
Dept. of Food Sci. and Tech., Fac. of Agric., Universitas Sumatera Utara, Indonesia
- PB0729 In-depth phenolic characterisation of *Cyclopia pubescens* (honeybush tea) using 2D chromatography and structure elucidation**  
Nico A. Walters<sup>1,2</sup>, Elizabeth Joubert<sup>1,2</sup>, Andre De Villiers<sup>3</sup>, Ombeline Danton<sup>4</sup>, Dalene De Beer<sup>1,2</sup>  
<sup>1</sup>Plant Bioactives Group, Agricultural Res. Council (ARC), South Africa, <sup>2</sup>Dept. of Food Sci., Stellenbosch Univ., South Africa, <sup>3</sup>Dept. of Chem. and Polymer Sci., Stellenbosch Univ., South Africa, <sup>4</sup>Pharm. Biol., Pharmacenter, Univ. of Basel, Switzerland
- PB0730 Biological activity of subcritical water extracts from citrus peel**  
Dong-Shin Kim, Sang-bin Lim  
Dept. of Food Bioeng., Jeju Natl. Univ., Korea

- PB0731 Biosynthesis of novel highly water soluble hesperetin phosphate conjugates via a unique microbial biotransformation pathway**  
Chen Hsu<sup>1</sup>, Yuan-Po Liu<sup>2</sup>, Nan-Wei Su<sup>1,2</sup>  
<sup>1</sup>Dept. of Agric. Chem., Natl. Taiwan Univ., Taiwan, <sup>2</sup>Dept. of Biochem. Sci. and Technol., Natl. Taiwan Univ., Taiwan
- PB0732 A new enzyme for biosynthesis water-soluble flavonoid O-phosphate from *Bacillus subtilis* BCRC80517**  
Chen Hsu, Nan-Wei Su  
 Dept. of Agric. Chem., Natl. Taiwan Univ., Taiwan
- PB0736 Combined effect of  $\alpha$ -tocopherol and antioxidants on liposome oxidation by hydroxyl radicals**  
Ikuko Minami<sup>1</sup>, Ayumi Umeda<sup>1</sup>, Chikako Inaba<sup>1</sup>, Hiroshi Kobayashi<sup>2</sup>, Hiroya Ishikawa<sup>2</sup>  
<sup>1</sup>Intl. Coll. of Arts and Sci., Fukuoka Women's Univ., Japan, <sup>2</sup>Grad. Sch. of Health and Environ. Sci., Fukuoka Women's Univ., Japan
- PB0738 Augmentation of anti-proliferative and anti-tumor effects of oxaliplatin by luteolin in colorectal tumor model**  
 Chan ho Jang<sup>1</sup>, Nayoung Moon<sup>1</sup>, Jisun Oh<sup>2</sup>, Jong-Sang Kim<sup>1,2</sup>  
<sup>1</sup>Sch. of Food Sci Biotechnol, Kyungpook Nat'l Univ., Korea, <sup>2</sup>Inst. Agric. Sci. Technol., Kyungpook Natl. Univ., Korea
- PB0741 Neuroprotective potential of novel ferulic acid-rutinoside enzymatically synthesized using ruinose in *C. elegans***  
Kanako Matsumoto<sup>1</sup>, Patipark Kueanjinda<sup>2</sup>, Takakazu Mitani<sup>1</sup>, HyunYoung Park<sup>3</sup>, Dhiraj A. Vatterm<sup>3</sup>, Soichiro Nakamura<sup>1</sup>, Shigeru Katayama<sup>1,2</sup>  
<sup>1</sup>Dept. of Agric., Grad. Sch. of Sci. Tech., Shinshu Univ., Japan, <sup>2</sup>Div. of Biomol. Innov, Biomed. Inst., Shinshu Univ., Japan, <sup>3</sup>Edison Biotech. Inst., Ohio Univ., USA
- B) Food Factors: Probiotics and Prebiotics**
- PB0801 *In vitro* adsorption mechanism of acrylamide by lactic acid bacteria**  
Meili Shao, Honghua Xu, Fei Teng, Guoping Yu  
 Coll. of Food Sci., Northeast Agric. Univ., China
- PB0802 Amelioration of hepatic steatosis by ingestion of raffinose via modulation of bile acid metabolism in rats**  
Kenta Maegawa<sup>1</sup>, Satoshi Ishizuka<sup>2</sup>  
<sup>1</sup>Grad. Sch. of Agric., Hokkaido Univ., Japan, <sup>2</sup>Res. Fac. of Agric., Hokkaido Univ., Japan
- PB0803 Developing simple extraction of potato arabinogalactan acts as prebiotics**  
Masahiro Saito<sup>1</sup>, Masaaki Konishi<sup>2</sup>  
<sup>1</sup>Dept. of Biotech. and Environ. Chem., Grad. Sch. of Eng., Kitami Inst. of Technol., Japan, <sup>2</sup>Biotech. and Food Chem. Crs. Program, Sch. of Regional Innov. and Social Design Eng., Kitami Inst. of Technol., Japan

**PB0804 Search and analysis for probiotics which could enhance IL-12 expression in macrophage-like cells**

Tsukiho Hiura<sup>1</sup>, Kana Umetani<sup>2</sup>, Masahiko Suzuki<sup>3</sup>, Kanata Hagiwara<sup>2</sup>, Mizuki Honda<sup>1</sup>, Yuji Tsujikawa<sup>3</sup>, Iwao Sakane<sup>3</sup>, Hidenori Hayashi<sup>2</sup>, Hideo Satsu<sup>2</sup>

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**PB0805 The effect of combination with water-soluble and -insoluble dietary fiber on mice microbiota**

Hiroyuki Sasaki<sup>1,3</sup>, Aya Watanabe<sup>1</sup>, Yuki Nakayama<sup>1</sup>, Fumiaki Nakamura<sup>2</sup>, Yoichi Nakao<sup>2</sup>, Shigenobu Shibata<sup>1</sup>

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**PB0806 An assessment of the stability and prebiotic potential of crude flaxseed mucilage**

Thu M. Nguyen<sup>1</sup>, Dominic Agyei<sup>1,2</sup>, Ian Sims<sup>2,3</sup>, Gerald Tannock<sup>2,4</sup>

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**PB0807 Application of isomalto-oligosaccharide: development of functional food formula for risk reduction of chronic kidney disease**

Kridsada Keawwyok<sup>1</sup>, Santad Wichienchot<sup>1</sup>, Saowakon Wattanachant<sup>2</sup>, Nualpun Sirinupong<sup>1</sup>, Preeya Dat-arun<sup>1</sup>, Suwikran Wongraphairot<sup>3</sup>

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**PB0808 Preventive effect of allicin-free garlic on gut microbiome dysbiosis**

Keyu Chen<sup>1</sup>, Kun Xie<sup>1</sup>, Kozue Sakao<sup>1,2</sup>, De-Xing Hou<sup>1,2</sup>

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**PB0809 Evaluation of the prebiotic effects of inulin-type fructans on human colonic microbiota**

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**PB0810 The host immunoresponsiveness influences probiotic functions of inulin**

Yu Arima<sup>1</sup>, Kenjiro Shiozawa<sup>2</sup>, Masayuki Noguchi<sup>2</sup>, Yori Ozaki-Masuzawa<sup>2</sup>, Takashi Hosono<sup>1,2</sup>, Taiichiro Seki<sup>1,2</sup>

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**PB0811 Effect of combined consumption of *Lactobacillus brevis* KB290 and  $\beta$ -carotene on minor diarrhea-predominant irritable bowel syndrome-like symptoms**

Nobuo Fuke<sup>1</sup>, Koichi Aizawa<sup>1</sup>, Hiroyuki Suganuma<sup>1</sup>, Tomohisa Takagi<sup>2</sup>, Yuji Naito<sup>2</sup>

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**PB0812 Efficacy of partially hydrolyzed guar gum on high fat diet-induced metabolic syndrome in mice**

Aya Abe<sup>1,2</sup>, Keiko Abe<sup>2</sup>, Ryo Inoue<sup>3</sup>, Yuji Naito<sup>4</sup>, Zenta Yasukawa<sup>1,5</sup>, Makoto Ozeki<sup>1,5</sup>, Tsutomu Okubo<sup>1,5</sup>, Shinji Okada<sup>2</sup>

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**PB0813 Co-expression of alcohol dehydrogenase and aldehyde dehydrogenase in food-grade *Bacillus subtilis* for alcohol detoxification**

Yingjian Lu<sup>1</sup>, Jing Lu<sup>2</sup>, Xiangfei Li<sup>1</sup>, Xiaoyu Zhu<sup>2</sup>, Chong Zhang<sup>2</sup>, Fengxia Lu<sup>2</sup>, Zhaoxin Lu<sup>2</sup>

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**PB0814 Screening and study of probiotics with antiviral potential**

Hsiu-Han Hsu<sup>1</sup>, Je-Ruei Liu<sup>1,2,3</sup>

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**B) Food Factors: Sulfur Compounds**

**PB0901 Garlic-odor precursor suppresses melanoma tumor growth by inducing apoptosis**

Tomoya Sakaguchi<sup>1</sup>, Tomoaki Yazaki<sup>1</sup>, Yusuke Yamaguchi<sup>1</sup>, Hiroyuki Hara<sup>2</sup>, Hitomi Kumagai<sup>1</sup>

<sup>1</sup>Coll. of Bioresource Sci., Nihon Univ., Japan, <sup>2</sup>Sch. of Med., Nihon Univ., Japan

**PB0902 Suppressive effect of garlic-odor precursor on blood-ethanol elevation**

Taisei Hagio<sup>1</sup>, Ayumu Hase<sup>1</sup>, Yusuke Yamaguchi<sup>1</sup>, Harumi Uto-Kondo<sup>1</sup>, Takeshi Saito<sup>2</sup>, Hitomi Kumagai<sup>1</sup>

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**PB0903 Induction of phase II enzymes by a flavor compound from radish sprouts**

Kazuki Ogawa, Mikio Sugiki, Yusuke Yamaguchi, Hitomi Kumagai

Dept. of Chem. and Life Sci., Nihon Univ., Japan

**PB0904 Improvement of the benzyl isothiocyanate stability in aqueous solutions**

Toshiyuki Nakamura, Yoshiyuki Murata, Yoshimasa Nakamura

Grad. Sch. of Environ. Life Sci., Okayama Univ., Japan



- PB0905 Radiation-protective abilities of DADS, a garlic oil component in X-ray irradiated mice**  
Tetsuo Nakajima<sup>1</sup>, Yasuharu Ninomiya<sup>1</sup>, Mitsuru Neno<sup>2</sup>  
<sup>1</sup>Dept. of Radiation Effects Res., Natl. Inst. of Radiol. Sci., QST, Japan, <sup>2</sup>Dept. of Safety Administration, Natl. Inst. of Radiol. Sci., QST, Japan
- PB0906 Benzyl isothiocyanate enhances insulin signaling in adipocytes**  
Sayuri Nakata, Ying Liang, Toshiyuki Nakamura, Shintaro Munemasa, Yoshiyuki Murata, Yoshimasa Nakamura  
Grad. Sch. of Environ. Life Sci., Okayama Univ., Japan
- PB0907 Effects of 6-(methylsulfinyl)hexyl isothiocyanate on induction of aldehyde dehydrogenase in hepatocytes**  
Tomoya Kitakaze, Sihao Yuan, Hitoshi Ashida  
Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan
- PB0908 Analysis of mechanism underlying gastric mucosal cell death induced by sodium sulfite**  
Moeri Oshimo, Kenji Kai, Mitsugu Akagawa  
Grad. Sch. of Life and Environ. Sci., Osaka Pref. Univ., Japan
- PB0909 Oral galactooligosaccharide administration diminishes the improvement in allergy severity induced by oral immunotherapy in an allergic mouse model**  
Akihiro Maeta, Risako Katahira, Kyoko Takahashi  
Dept. of Food Sci. and Nutr., Mukogawa Women's Univ., Japan
- B) Food Factors: Vitamins**
- PB1001 Characterization of vitamin B<sub>12</sub> compounds in food ingredients used in chinese cuisine**  
Fei Teng, Guoping Yu, Meili Shao, Honghua Xu  
Coll. of Food Sci., Northeast Agric. Univ., China
- PB1002 Vitamin A plays a pivotal role in hepatic-retinal axis under dual effects of acetaminophen injections and excessive ocular LED exposure**  
Min-Chun Chang<sup>1</sup>, David Pei Cheng Lin<sup>2</sup>, Han-Hsin Chang<sup>1</sup>  
<sup>1</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan
- PB1003 Characterization of the monoclonal antibody to  $\alpha$ -carboxyethyl hydroxychroman**  
Daiki Moriya, Toshiyuki Nakamura, Shintaro Munemasa, Yoshiyuki Murata, Yoshimasa Nakamura  
Grad. Sch. of Environ. Life. Sci., Okayama Univ., Japan

**PB1004 Development of a method to analyze the water-soluble vitamins in vegetables**

Yu-Tsung Lee<sup>1</sup>, Hui-Yi Chang<sup>1</sup>, Li-Heng Pao<sup>1</sup>, Chun-Hui Chiu<sup>1,2</sup>

<sup>1</sup>Chang Gung Univ. of Sci. and Technol., Taiwan, <sup>2</sup>Dept. of Traditional Chinese Med., Chang Gung Memorial Hosp., Taiwan

**PB1005 Vitamin B<sub>12</sub> and folate contents of commercially available *Chlorella* supplements**

Hiroyasu Harada, Kyohei Koseki, Tomohiro Bito, Fumio Watanabe

Dept. of Agric. Sci., Grad. Sch. of Sustainability Sci., Tottori Univ., Japan

**PB1006 Characterization of vitamin B<sub>12</sub> compounds in edible insects**

Naho Okamoto<sup>1</sup>, Fumi Nagao<sup>2</sup>, Tomohiro Bito<sup>2</sup>, Yukinori Yabuta<sup>1,2</sup>, Prangthip Pattaneeaya<sup>3</sup>, Fumio Watanabe<sup>1,2</sup>

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**PB1007 Identification of vitamin K binding protein by using magnetic beads to reveal vitamin K metabolic mechanism**

Masaharu Kobayashi<sup>1</sup>, Satoshi Asano<sup>2</sup>, Ayako Furukawa<sup>3</sup>, Maya Kamao<sup>4</sup>, Yoshitomo Suhara<sup>1,2</sup>, Yoshihisa Hirota<sup>1,2</sup>

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**PB1008 Fortification of brown rice with folic acid through surface modification and absorption**

Rhowell N. Tiozon Jr.<sup>1,3</sup>, Aldrin P. Bonto<sup>1,3</sup>, Drexel H. Camacho<sup>1,2</sup>, Glen Oyong<sup>2</sup>, Nese Sreenivasulu<sup>3</sup>, Catleya Rojviriyaa<sup>4</sup>

<sup>1</sup>Chem. Dept., De La Salle Univ., Philippines, <sup>2</sup>Organic Materials and Interfaces Unit, CENSER, De La Salle Univ., Philippines, <sup>3</sup>Grain Quality and Nutr. Cent., Intl. Rice Res. Inst., Philippines, <sup>4</sup>Synchrotron Light Res. Inst. (Public Organization), Thailand

**PB1009 Comparative analysis of the female reproductive functions among genetically modified rats in *Cyp27b1* or vitamin D receptor**

Mana Yamaguchi, Miyu Nishikawa, Shinichi Ikushiro, Toshiyuki Sakaki

Fac. of Eng., Toyama Pref. Univ., Japan

**PB1010 Effects of vitamin D on development of bone and skeletal muscle in *Cyp27b1*-KO and *Vdr*-KO rickets rat models**

Kento Hibi, Miyu Nishikawa, Shinichi Ikushiro, Toshiyuki Sakaki

Fac. of Eng., Toyama Pref. Univ., Japan

**PB1011 Evaluation of the vitamin K side-chain cleavage mechanism by use of hydrogenated vitamin K<sub>1</sub>**

Satoshi Asano<sup>1</sup>, Maya Kamao<sup>2</sup>, Yoshitomo Suhara<sup>1</sup>, Yoshihisa Hirota<sup>1</sup>

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- PB1012 Effects of vitamin D on the differentiation of mouse embryonic cerebrum derived neural stem cells**  
Yoshihisa Hirota<sup>1,2</sup>, Maya Kamao<sup>2</sup>, Toshiyuki Sakaki<sup>3</sup>, Naomi Osakabe<sup>1</sup>, Yoshitomo Suhara<sup>1</sup>, Toshio Okano<sup>2</sup>  
<sup>1</sup>Dept. Biosci. and Eng., Coll. Sys. Eng. and Sci., Shibaura Inst. Technol., Japan, <sup>2</sup>Dept. Hyg. Sci., Kobe Pharm. Univ., Japan, <sup>3</sup>Dept. Pharm. Eng., Fac. Eng., Toyama Pref. Univ., Japan
- PB1013 Transcriptome analysis reveals mechanism of Vitamin K-induced neuronal differentiation**  
Yuta Takagi<sup>1</sup>, Yutaro Yamashita<sup>1</sup>, Maya Kamao<sup>2</sup>, Yoshitomo Suhara<sup>1</sup>, Yoshihisa Hirota<sup>1</sup>  
<sup>1</sup>Sys. Eng. and Sci., Grad. Sch. Eng. and Sci., Shibaura Inst. Technol., Japan, <sup>2</sup>Ext. Cent., Kobe Pharm Univ., Japan
- PB1014 Structure-activity correlation of vitamin K revealed by neural differentiation activity**  
Yutaro Yamashita<sup>1</sup>, Mayu Okazeri<sup>2</sup>, Taiki Sato<sup>1</sup>, Maya Kamao<sup>3</sup>, Yoshitomo Suhara<sup>1,2</sup>, Yoshihisa Hirota<sup>1,2</sup>  
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- PB1015 Comparison of breast milk vitamin D and 25-hydroxyvitamin D concentration of Japanese breastfeeding women in 1989 and 2016-2017**  
Mayu Nishino<sup>1</sup>, Akiko Kuwabara<sup>2</sup>, Honami Ogasawara<sup>3</sup>, Maya Kamao<sup>4</sup>, Shunjiro Kobayashi<sup>5</sup>, Junichi Yamamura<sup>5</sup>, Naoko Tsugawa<sup>1,3</sup>  
<sup>1</sup>Div. of Human Dietics, Grad. Sch. of Human Sci., Osaka Shoin Women's Univ., Japan, <sup>2</sup>Dept. of Clin. Nutr., Fac. of Comp. Rehab., Osaka Pref. Univ., Japan, <sup>3</sup>Dept. of Health and Nutr., Osaka Shoin Women's Univ., Japan, <sup>4</sup>Extension Ctr., Kobe Pharm. Univ., Japan, <sup>5</sup>Res. and Dev. Dept., Bean Stalk Snow Co., Ltd., Japan
- PB1016 Cross-sectional survey for vitamin D status of healthy Japanese adults in the health life research complex program**  
Naoko Tsugawa<sup>1,2</sup>, Akiko Kuwabara<sup>3</sup>, Chihiro Ura<sup>2</sup>, Honami Ogasawara<sup>1</sup>, Kei Mizuno<sup>4</sup>, Yasuyoshi Watanabe<sup>4</sup>, Kiyoshi Tanaka<sup>5</sup>  
<sup>1</sup>Dpt. of Health and Nutr., Osaka Shoin Women's Univ., Japan, <sup>2</sup>Div. of Human Dietics, Grad. Sch. of Human Sci., Osaka Shoin Women's Univ., Japan, <sup>3</sup>Dept. of Clin. Nutr., Fac. of Comp. Rehab., Osaka Pref. Univ., Japan, <sup>4</sup>RIKEN Cluster for Sci. and Technol. Hub Compass to Health Life Res. Complex Program, Japan, <sup>5</sup>Dept. of Fac. of Nutr., Kobe Gakuin Univ., Japan
- PB1017 Protein engineering of CYP105A1 to produce active forms of vitamin D**  
Teisuke Takita<sup>1</sup>, Yuya Yogo<sup>2</sup>, Kaori Yasuda<sup>3</sup>, Hiroshi Sugimoto<sup>4</sup>, Yoshitsugu Shiro<sup>4</sup>, Shinichi Ikushiro<sup>2</sup>, Sho Nemoto<sup>1</sup>, Ren Ohashi<sup>1</sup>, Moeka Wada<sup>1</sup>, Kiyoshi Yasukawa<sup>1</sup>, Toshiyuki Sakaki<sup>3</sup>  
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**PB1018 Vitamin D supplementation protects against cerebral ischemia/reperfusion injury in Sprague-Dawley rats**

Chi-Hao Wu<sup>1,2</sup>, Ming-Ya Kung<sup>2</sup>, Hsiao-En Tai<sup>1</sup>

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**B) Food Factors: Others**

**PB1101 Analysis of food-derived nucleic acids and their effects on claudin-4 mRNA expression in differentiated Caco-2 models**

Naomi Abe-Kanoh<sup>1</sup>, Erika Nuka<sup>1</sup>, Mao Aoki<sup>2</sup>, Kotono Minami<sup>2</sup>, Miyuki Uemura<sup>2</sup>, Hiroataka Sekiguchi<sup>3</sup>, Keita Sutoh<sup>3</sup>, Koji Usumi<sup>3</sup>, Kohta Ohnishi<sup>1</sup>, Yoshichika Kawai<sup>1</sup>

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**PB1102 Characterization of glucosyl rebaudioside a produced by dextranucrase from *Leuconostoc lactis***

Hyejin Kang, Ha-Nul Lee, So-Hyeon Lee, Young-Min Kim

Dept. of Food Sci. and Technol., Chonnam Natl. Univ., Korea

**PB1103 The green tea polyphenol epigallocatechin-3-gallate attenuates age-associated muscle loss via regulation of myostatin and miR-486**

Shu-Hui Hu<sup>2,3</sup>, Ming-Yi Liu<sup>4</sup>, Yun-Ching Chang<sup>1,5</sup>, Sue-Joan Chang<sup>1</sup>

<sup>1</sup>Dept. of Life Sci., Natl. Cheng Kung Univ., Taiwan, <sup>2</sup>Dept. of Med. Lab. Sci. and Biotechnol., <sup>3</sup>Dept. of Med. Res., Kaohsiung Med. Univ. Hosp., Taiwan, <sup>4</sup>Dept. of Long Term Care, Wu Feng Univ., Taiwan, <sup>5</sup>Dept. of Nursing, Shu-Zen Coll. of Med. and Management, Taiwan

**PB1104 Quality evaluation and stabilized of food-grade microemulsions with the evening primrose oil**

Hong-Yan Wu, Qi-An, Xiu-Xin Li, De-Cong Zhang, Ying-Yi Xu

Coll. of Food and Biol. Eng., Qiqihar Univ., China

**PB1105  $\alpha$ -Monoglucosyl hesperidin but not hesperidin induces brown-like adipocyte formation and suppresses white adipose tissue accumulation in mice**

Takuma Hyodo<sup>1</sup>, Sho Nishikawa<sup>1</sup>, Tsubasa Nagao<sup>1</sup>, Akihito Nakanishi<sup>2</sup>, Mahamadou Tandia<sup>2</sup>, Takanori Tsuda<sup>1</sup>

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**PB1106 Loss of key components, methylglyoxal and 2'-methoxyacetophenone, in manuka honey by heat processing**

Yui Kishi<sup>1</sup>, Masaki Kawai<sup>1</sup>, Yayako Okano<sup>1</sup>, Naoko Suga<sup>1</sup>, Mai Kato<sup>2</sup>, Akika Nagata<sup>2</sup>, Noriyuki Miyoshi<sup>2</sup>, Yoji Kato<sup>1,3</sup>

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**PB1107 Vegetable nitrate intake is associated with better memory and lower risk of depression: The AusDiab study**

Catherine P. Bondonno<sup>1,2</sup>, Lauren Blekkenhorst<sup>1,2</sup>, Nicola P. Bondonno<sup>1,2</sup>, Marc Sim<sup>1,2</sup>, Simone Radavelli Bagatini<sup>1</sup>, Kevin D. Croft<sup>3</sup>, Dianna J. Magliano<sup>4</sup>, Jonathan E. Shaw<sup>4</sup>, Kaarin J. Anstey<sup>5</sup>, Robin M. Daly<sup>6</sup>, Joshua R. Lewis<sup>1,2,7</sup>, Jonathan M. Hodgson<sup>1,2</sup>

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**PB1108 Functionality assessment of dried persimmon fruits and persimmon-derived tannins**

Yoko Matsumura<sup>1,2</sup>, Shin-ichi Kayano<sup>1</sup>, Noriko Ouji-Sageshima<sup>2</sup>, Naoko Mochida<sup>3</sup>, Masahiro Kitabatake<sup>2</sup>, Toshihiro Ito<sup>2</sup>

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**C) Functions and Mechanisms: Allergy and Immune Modulation**

**PC0101 Immunostimulatory effects of subcritical water extract of *Gnoderma***

Koji Hattori<sup>1</sup>, Hiroshi Takagi<sup>1</sup>, Yuichiro Ogata<sup>1</sup>, Takaaki Yamada<sup>1</sup>, Kousuke Fukata<sup>1</sup>, Tsutomu Sakaida<sup>1</sup>, Youichi Yashiro<sup>1</sup>, Seiji Hasegawa<sup>1,2</sup>, Satoru Nakata<sup>1</sup>, Hiroyuki Tanaka<sup>3</sup>

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**PC0102 Combination of glucan and vegetable soup demonstrates synergistic effects on the immune system in murine**

Ha-Nul Lee<sup>1</sup>, Ji-Yeon Park<sup>2</sup>, Joo-Hee Choi<sup>2</sup>, Jong-Hwan Park<sup>2</sup>, Young-Min Kim<sup>1</sup>

<sup>1</sup>Dept. of Food Sci. and Technol., Chonnam Natl. Univ., Korea, <sup>2</sup>Lab. Animal Med., Coll. of Vet. Med. and BK21 Plus Project Team, Chonnam Natl. Univ., Korea

**PC0103 Role of CCL28 on the development and immunological function of thymus and spleen in mouse**

Miho Takahashi<sup>1</sup>, Chihiro Yamamoto<sup>1</sup>, Tsuyoshi Koide<sup>2</sup>, Kazuto Yoshimi<sup>3</sup>, Kazutoshi Sayama<sup>1,4</sup>

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**PC0104 The role of CCL28 on the development of Peyer's patches in mouse**

Maho Tange<sup>1</sup>, Taito Fukuhara<sup>1</sup>, Tsuyoshi Koide<sup>2</sup>, Kazuto Yoshimi<sup>3</sup>, Kazutoshi Sayama<sup>1,4</sup>

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- PC0105 Effect of *Echinacea purpurea* extracts on allergic reaction in mast cells**  
Anuu Zorig<sup>1</sup>, Rine Toko<sup>1</sup>, Enkhtsetseg Sukhbold<sup>1</sup>, Mikako Takasugi<sup>2</sup>, Hirofumi Arai<sup>1</sup>  
<sup>1</sup>Dept. of Biotechnol. Environ. Chem., Kitami Inst. of Technol., Japan, <sup>2</sup>Dept. of Life Sci., Kyushu Sangyo Univ., Japan
- PC0106 Anti-allergic effects of docosahexaenoyl ethanolamide (DHEA), a metabolite of docosahexaenoic acid (DHA)**  
Yoshiki Kanayama<sup>1</sup>, In-Hae Kim<sup>1</sup>, Takuya Sugahara<sup>1,2</sup>, Kosuke Nishi<sup>1,2</sup>  
<sup>1</sup>Dept. of Biosci., Grad. Sch. of Agric., Ehime Univ., Japan, <sup>2</sup>Food Health Sci. Res. Ctr., Ehime Univ., Japan
- PC0107 Inhibition of degranulation by phospholipids derived from green asparagus**  
Hiroshi Hamajima<sup>1</sup>, Akira Iwamoto<sup>2</sup>, Keisuke Tsuge<sup>2</sup>, Yumi Tsuruta<sup>2</sup>, Hiroaki Yotsumoto<sup>3</sup>, Teruyoshi Yanagita<sup>1,3</sup>  
<sup>1</sup>Saga Food and Cosmetics Lab., Div. of Res. and Dev. Promotion, Saga Regional Ind. Support Cent., Japan, <sup>2</sup>Div. of Food Ind., Industrial Technol. Cent. of Saga, Japan, <sup>3</sup>Dept. of Health and Nutr. Sci., Fac. of Health and Nutr. Sci., Nishikyushu Univ., Japan
- PC0108 Suppression of leukotrienes release from mast cells by lysophosphatidylcholine derived from squid and starfish**  
Mikako Takasugi<sup>1</sup>, Shogo Kakoi<sup>1</sup>, Shintaro Yasutake<sup>1</sup>, Hirofumi Arai<sup>2</sup>  
<sup>1</sup>Dept. of Life Sci., Kyushu Sangyo Univ., Japan, <sup>2</sup>Dept. of Biotechnol. Environ. Chem., Kitami Inst. of Technol., Japan
- PC0109 Intake of collagen peptide ameliorates immune status –Randomized placebo-controlled double-blind trial–**  
Kumiko Kuwaba<sup>1</sup>, Yoh-ichi Koyama<sup>1,3</sup>, Yukihiko Tsukada<sup>2</sup>, Masashi Kusubata<sup>1</sup>, Kazunori Mizuno<sup>1</sup>  
<sup>1</sup>Res. Inst. of Biomatrix, Nippi Inc., Japan, <sup>2</sup>Gelatin Div., Nippi Inc., Japan, <sup>3</sup>Inst. for Animal Reprod., Japan
- PC0111 Antiallergic effect of white rice on experimental allergic rhinitis model in mice**  
Yukio Sugimoto<sup>1</sup>, Atsushi Ogura<sup>1</sup>, Hisanori Kobara<sup>2</sup>, Yasutune Maruyama<sup>3</sup>, Hideyuki Ito<sup>4</sup>  
<sup>1</sup>Dept. of Pharma. Sci., Grad. Sch. of Med., Dent. and Pharma. Sci., Okayama Univ., Japan, <sup>2</sup>Nat. Fed. Agric. Co. Assoc. Okayama Pref. HQ., Agric. Prod. Div., Japan, <sup>3</sup>Okayama Pref. Gov. Agri. Market Promotion Sec., Japan, <sup>4</sup>Dept. of Nutr. Sci., Grad. Sch. of Health and Welfare Sci., Okayama Pref. Univ., Japan

## C) Functions and Mechanisms: Anti-inflammation

- PC0201 Screening of microsomal prostaglandin E synthase-1 inhibitor from food ingredients**  
Asako Tamenobu, Keisuke Toda, Izumi Tsukayama, Yuka Konoike, Yuki kawakami, Yoshitaka Takahashi, Toshiko Suzuki-Yamamoto  
 Dept. of Nutr. Sci., Okayama Pref. Univ., Japan

**PC0202 Red rice proanthocyanidin inhibits 5-lipoxygenase and exhibits therapeutic effect on psoriasis**

Keisuke Toda<sup>1</sup>, Yuki Nagasaki<sup>1</sup>, Izumi Tsukayama<sup>1</sup>, Asako Tamenobu<sup>1</sup>, Yuka Konoike<sup>1</sup>, Natsuki Ganeko<sup>1</sup>, Hideyuki Ito<sup>1</sup>, Yuki Kawakami<sup>1</sup>, Yoshitaka Takahashi<sup>1</sup>, Yoshimi Miki<sup>2</sup>, Kei Yamamoto<sup>3</sup>, Makoto Murakami<sup>2</sup>, Toshiko Suzuki-Yamamoto<sup>1</sup>

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<sup>3</sup>Grad. Sch. of Technol., Ind. Social Sci., Tokushima Univ., Japan

**PC0203 Anti-inflammatory effect of ellagitannins present in immature fruit of boysenberry**

Masaki Kawai<sup>1</sup>, Asami Hanamura<sup>1</sup>, Kino Hyodo<sup>1</sup>, Reiji Nakanishi<sup>1</sup>, Naoko Hiramatsu<sup>2</sup>, Noriyuki Miyoshi<sup>3</sup>, Yoji Kato<sup>1,2</sup>

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**PC0204 Pterostilbene exerts immunosuppressive effects through T cells and dendritic cells**

Takuya Yashiro, Shiori Yura, Akari Tobita, Yuki Toyoda, Chiharu Nishiyama

Dept. of Biol. Sci. Tech., Fac. Ind. Sci. Tech., Tokyo Univ. Sci., Japan

**PC0205 The effects of diallyl trisulfide derived from garlic on NF- $\kappa$ B signaling in macrophage**

Hirona Morishita<sup>1</sup>, Sachiko Okue<sup>1</sup>, Yori Ozaki-Masuzawa<sup>2</sup>, Takashi Hosono<sup>1,2</sup>, Taichiro Seki<sup>1,2</sup>

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**PC0206 Immunomodulating effects of extracts from *Lactobacillus casei* and *gasseri* –Anti-inflammatory effects on macrophage differentiation–**

Reika Ando<sup>1</sup>, Tomoo Taniguchi<sup>2</sup>, Saori Tomita<sup>1</sup>, Ken-ichiro Minato<sup>1</sup>

<sup>1</sup>Dept. of Appl. Biol. Chem., Meijo Univ., Japan, <sup>2</sup>Aichi-yoke Co., Ltd., Japan

**PC0207 The skin-protective effects of honeybush extracts**

Kaho Shiraiishi<sup>1</sup>, Elizabeth Joubert<sup>2</sup>, Christiaan Malberbe<sup>2</sup>, Yutaka Miura<sup>1</sup>

<sup>1</sup>Tokyo Univ. of Agric. & Technol., Japan, <sup>2</sup>Agric. Res. Council, South Africa

**PC0208 Oligosaccharides from agar extends the lifespan of *Caenorhabditis elegans***

Natsumi Desaka<sup>1</sup>, Hitomi Nishikawa<sup>1</sup>, Katsura Mizushima<sup>2</sup>, Tomohisa Takagi<sup>2</sup>, Yuji Naito<sup>2</sup>, Yasuki Higashimura<sup>1,2</sup>

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**PC0209 (-)-Epicatechin-3-gallate ameliorates sepsis-induced acute organ injuries and mortality via upregulation of Nrf2-regulated antioxidant effects**

Yi-Shiou Chiou<sup>1,2</sup>, Yike Jiang<sup>2,3</sup>, Chi-Tang Ho<sup>3</sup>, Min-Hsiung Pan<sup>1</sup>

<sup>1</sup>*Inst. of Food Sci. and Technol., Natl. Taiwan Univ., Taiwan*, <sup>2</sup>*Tsinghua Berkeley Shenzhen Inst. (TBSI), Tsinghua Univ., China*, <sup>3</sup>*Dept. of Food Sci., Rutgers Univ., USA*

**PC0210 Downregulating of pro-inflammatory mediators in particulate matter 2.5 um (PM2.5)-stimulated RAW 264.7 cells by ethanol extract of Moringa seed**

Yu-Wen Liu<sup>1</sup>, Shwu-Ling Peng<sup>2</sup>, Chia-Jui Weng<sup>1</sup>

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**C) Functions and Mechanisms: Autophagy**

**PC0301 Structure-activity relationship in programmed cell death induction mechanism of terpenes**

Kanako Chazono<sup>1</sup>, Taichi Hara<sup>2</sup>, De-xing Hou<sup>1,3</sup>, Kozue Sakao<sup>1,3</sup>

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**PC0302 Elucidation of the molecular mechanism underlying lysosomal activation in J774.1 cells by isorhamnetin treatment**

Maiko Sakai<sup>1</sup>, Kohta Ohnishi<sup>2</sup>, Masashi Masuda<sup>2</sup>, Hirokazu Ohminami<sup>2</sup>, Hisami Yamanaka-Okumura<sup>2</sup>, Taichi Hara<sup>3</sup>, Yutaka Taketani<sup>2</sup>

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**C) Functions and Mechanisms: Bioavailability and Metabolism**

**PC0401 Evaluation of the absorption and organ distribution of 1-deoxyojirimycin in rat**

Toshiyuki Kimura<sup>1</sup>, Soo Takasu<sup>2</sup>, Fukuyo Tanaka<sup>3</sup>, Kenji Yamagishi<sup>1</sup>, Teruo Miyazawa<sup>4</sup>, Kiyotaka Nakagawa<sup>2</sup>

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**PC0402 Theasinensin A promotes paracellular transport of hesperidin in Caco-2 cell**

Chizumi Abe<sup>1</sup>, Naoto Ohno<sup>1</sup>, Shu-wei Huang<sup>1</sup>, Alexia Nectoux<sup>1</sup>, Haruo Ymamura<sup>2</sup>, Toshiro Matsui<sup>1</sup>

<sup>1</sup>*Fac. of Agric., Grad. Sch. of Kyushu Univ., Japan*, <sup>2</sup>*Charle Co., Japan*



- PC0403 Study of the curcumin metabolism by human intestinal bacteria**  
Toshio Niwa<sup>1</sup>, Shin-ichiro Yokoyama<sup>2</sup>, Mika Mochizuki<sup>3</sup>, Toshihiko Osawa<sup>3</sup>  
<sup>1</sup>Fac. of Health Nutr., Shubun Univ., Japan, <sup>2</sup>Gifu Pref. Res. Inst. for Food Sci., Japan, <sup>3</sup>Fac. of Psychol. and Physical Sci., Aichi Gakuin Univ., Japan
- PC0404 Intestinal absorption of visualized anthocyanins in rats by matrix assisted laser desorption/ionization mass spectrometry imaging technique**  
Taehun Ham<sup>1</sup>, Huu-Nghi Nguyen<sup>1</sup>, Mitsuru Tanaka<sup>1</sup>, Ayaka Tsutsumi<sup>2</sup>, Qing Qiang Hu<sup>2</sup>, Koichi Aizawa<sup>2</sup>, Toshiro Matsui<sup>1</sup>  
<sup>1</sup>Div. of Biores. Bioenviro. Sci., Grad. Sch. of Agric. Sci., Kyushu Univ., Japan, <sup>2</sup>Res. and Dev., Kagome Inc., Japan
- PC0405 Enhanced absorption of prenylated isoflavones in rat circulating bloodstream**  
Ye Zhang<sup>1</sup>, Kazuhiro Takao<sup>1</sup>, Kuni Sasaki<sup>2</sup>, Kouji Ochiai<sup>2</sup>, Toshiro Matsui<sup>1</sup>  
<sup>1</sup>Div. Biores. Bioenvir. Sci., Grad. Sch. of Agric. Kyushu Univ., Japan, <sup>2</sup>Daizu Energy Co. Ltd., Japan
- PC0406 Pharmacokinetics and metabolism of components in Brazilian green propolis after oral administration in humans**  
Masayuki Yamaga<sup>1,2</sup>, Hiroko Tani<sup>2</sup>, Manamu Kitami<sup>3</sup>, Shin-ichi Ikushiro<sup>3</sup>, Kaeko Murota<sup>4</sup>  
<sup>1</sup>Appl. Bioresour Chem., Bioresour and Life Sci., The United Grad. Sch. of Agric. Sci., Tottori Univ., Japan, <sup>2</sup>Inst. for Bee Products and Health Sci., Yamada Bee Co. Inc., Japan, <sup>3</sup>Dep. Biotech., Fac. Engineer, Toyama Pref. Univ., Japan, <sup>4</sup>Dept. Life Sci., Fac. Life Environ. Life Sci., Shimane Univ., Japan
- PC0407 Yuzu (*Citrus junos* Sieb.ex Tanaka) peel extract can help prevent fatty liver disease induced by high sucrose diet in rats**  
Ayako Suzuki<sup>1</sup>, Miki Umeki<sup>2</sup>, Kaoru Nobuoka<sup>3</sup>, Satoshi Mochizuki<sup>1</sup>, Yuichi Ishikawa<sup>1</sup>  
<sup>1</sup>Fac. of Sci. and Technol., Oita Univ., Japan, <sup>2</sup>Dept. of Food Sci. and Hum. Nutr., Beppu Univ., Japan, <sup>3</sup>Fac. of Educ., Oita Univ., Japan
- PC0408 Enzymatic synthesis of conjugate metabolites of stilbene compounds using xenobiotic metabolizing enzymes expressing yeast**  
Mai Nakayama, Miyu Nishikawa, Keisuke Fukaya, Daisuke Urabe, Kaori Yasuda, Toshiyuki Sakaki, Shinichi Ikushiro  
Dep. of Biotech., Fac. of Eng., Toyama Pref. Univ., Japan
- PC0409 Biosynthesis of methyl flavonoids using genetically engineered yeast cells with human catechol-O-methyltransferase**  
Yuuka Masuyama<sup>1</sup>, Miyu Nishikawa<sup>1</sup>, Kaori Yasuda<sup>2</sup>, Toshiyuki Sakaki<sup>2</sup>, Shinichi Ikushiro<sup>1</sup>  
<sup>1</sup>Dep. of Biotech., Fac. of Eng., Toyama Pref. Univ., Japan, <sup>2</sup>Dep. of Pharm., Fac. of Eng., Toyama Pref. Univ., Japan

## C) Functions and Mechanisms: Bone Health

### PC0501 Analysis of improvement mechanism of abnormalities in bone metabolism by fatty acid metabolites produced by lactic acid bacteria

Mayu Kikuchi<sup>1</sup>, Yusuke Itoh<sup>1</sup>, Ryuji Ohue-Kitano<sup>2</sup>, Rie Katsumata-Tsuboi<sup>1</sup>, Miori Tanaka<sup>1</sup>, Hirofumi Inoue<sup>1</sup>, Shigenobu Kishino<sup>3</sup>, Tsuyoshi Goto<sup>3</sup>, Teruo Kawada<sup>3</sup>, Ikuo Kimura<sup>2</sup>, Jun Ogawa<sup>3</sup>, Nobuyuki Takahashi<sup>1</sup>, Mariko Uehara<sup>1</sup>

<sup>1</sup>Grad. Sch. of Agric., Tokyo Univ. of Agric., Japan, <sup>2</sup>Grad. Sch. of Agric., Tokyo Univ. of Agric. and Technol., Japan, <sup>3</sup>Grad. Sch. of Agric., Kyoto Univ., Japan

### PC0502 Collagen-derived dipeptide prolyl hydroxyproline directly binds to Foxg1 to change its conformation and inhibit the interaction with Runx2

Kaho Nomura<sup>1</sup>, Yoshifumi Kimira<sup>1</sup>, Yoshihiro Osawa<sup>1</sup>, Jun Shimizu<sup>1</sup>, Aya Kataoka-Matsushita<sup>1,2</sup>, Hiroshi Mano<sup>1</sup>

<sup>1</sup>Fac. of Pharma. Sci., Josai Univ., Japan, <sup>2</sup>Nitta Gelatin Inc., Japan

### PC0503 Collagen-derived dipeptide prolyl-hydroxyproline promotes differentiation of MC3T3-E1 osteoblastic cells

Yoshifumi Kimira<sup>1</sup>, Yoshihiro Osawa<sup>1</sup>, Kaho Nomura<sup>1</sup>, Aya Matsushita<sup>2</sup>, Naoki Inoue<sup>2</sup>, Sachie Nakatani<sup>1</sup>, Jun Shimizu<sup>1</sup>, Masahiro Wada<sup>1</sup>, Hiroshi Mano<sup>1</sup>

<sup>1</sup>Fac. of Pharma. Sci., Josai Univ., Japan, <sup>2</sup>Nitta Gelatin Inc., Japan

### PC0504 Salmon cartilage proteoglycan prevents degradation of the bone quality in ovariectomized rats

Hiroyuki Nozaka<sup>1</sup>, Erika Ozaki<sup>1</sup>, Toshiya Nakamura<sup>2</sup>, Ikuko Kakizaki<sup>1</sup>, Masashi Goto<sup>2</sup>, Yutaka Suekawa<sup>2</sup>, Kazushi Yamamoto<sup>2</sup>, Yoji Kato<sup>1</sup>

<sup>1</sup>Grad. Sch. of Health Sci., Hiroasaki Univ., Japan, <sup>2</sup>Sunstar. INC, Japan

### PC0505 The effectivity of difructose anhydride III (DFA III) to increase absorption of calcium in rat femur bone of calcium deficient model

Ainia Herminiati<sup>1</sup>, Rimbawan<sup>2</sup>, Budi Setiawan<sup>2</sup>, Dewi Apri Astuti<sup>3</sup>, Linar Zalinar Udin<sup>4</sup>, Sri Pudjiastuti<sup>4</sup>

<sup>1</sup>Res. Cent. for Appropriate Technol., Indonesian Inst. of Sci., Indonesia, <sup>2</sup>Dept. of Community Nutr., Fac. of Human Ecol., IPB Univ., Indonesia, <sup>3</sup>Dept. of Nutr. and Feed Technol., Fac. of Animal Sci., IPB Univ., Indonesia, <sup>4</sup>Res. Cent. for Chem., Indonesian Inst. of Sci., Indonesia

### PC0506 High cholesterol diet-induced bone loss is primarily due to elevated osteoclastogenesis in mice

O. J. Sul<sup>1</sup>, J. H. Suh<sup>2</sup>, H. S. Choi<sup>1</sup>

<sup>1</sup>Dept. of Biological Sciences Univ. of Ulsan, Korea, <sup>2</sup>Dept. of Pathol, Ulsan Univ. Hosp., Korea

## C) Functions and Mechanisms: Brain Health

### PC0601 Improvement effects of subcritical water extract of Ganoderma on cognitive function

Tomohiro Matsumoto<sup>1</sup>, Hiroshi Takagi<sup>1</sup>, Kousuke Fukata<sup>1</sup>, Tsutomu Sakaida<sup>1</sup>, Youichi Yashiro<sup>1</sup>, Seiji Hasegawa<sup>1,2</sup>, Satoru Nakata<sup>1</sup>, Hiroyuki Tanaka<sup>3</sup>

<sup>1</sup>Res. Lab., Nippon Menard Cosmetic Co., LTD., Japan, <sup>2</sup>Nagoya Univ. -MENARD Collaborative Res. Chair, Nagoya Univ. Grad. Sch. of Med., Japan, <sup>3</sup>Lab. of Pharma., Dept. of Bioactive Mol., Gifu Pharmaceutical Univ., Japan

### PC0602 $\alpha$ -Lipoic acid enhances phagocytosis of oligomeric $\beta$ -amyloid1-42 into BV-2 mouse brain microglia cells via ameliorating CD36 pathway

Szu-Chuan Shen<sup>1</sup>, You-Wei Chang<sup>1</sup>, Wen-Chang Chang<sup>2</sup>, James Swi-Bea Wu<sup>3</sup>

<sup>1</sup>Grad. Program of Nutr. Sci., Natl. Taiwan Normal Univ., Taiwan, <sup>2</sup>Dept. of Food Sci., Natl. Chiayi Univ., Taiwan, <sup>3</sup>Grad. Inst. of Food Sci. and Technol., Natl. Taiwan Univ., Taiwan

### PC0603 All tyrosine-containing dipeptides have distinct effects on brain function

Takashi Ichinose<sup>1</sup>, Shigeki Furuya<sup>1,2</sup>

<sup>1</sup>Dept. of Biosci. and Biotech., Grad. Sch. of Biores. and Bioenv., Kyushu Univ., Japan, <sup>2</sup>Innovative Bio-Architecture Cent., Fac. of Agr., Kyushu Univ., Japan

### PC0604 Neuroprotective effect of *Spirulina maxima* in HT22 cells

Yelim Son<sup>1</sup>, Hyeonwoo Lee<sup>1</sup>, Choong Je Ma<sup>1,2</sup>

<sup>1</sup>Dept. of Med. Biomaterials Eng., Coll. of Biomed. Sci., Kangwon Natl. Univ., Korea, <sup>2</sup>Inst. of Biosci. and Biotechnol., Kangwon Natl. Univ., Korea

### PC0605 Improvement of cognitive and spatial learning ability of *Corchorus olitorius* L.in Amnesia mice

Yelim Son<sup>1</sup>, Hyeonwoo Lee<sup>1</sup>, Choong Je Ma<sup>1,2</sup>

<sup>1</sup>Dept. of Med. Biomaterials Eng., Coll. of Biomed. Sci., Kangwon Natl. Univ., Korea, <sup>2</sup>Inst. of Biosci. and Biotechnol., Kangwon Natl. Univ., Korea

### PC0606 Holy basil improves cognition and neurodegeneration in animal model of menopause with obesity

Suparporn Muchimapura<sup>1,2</sup>, Jintanaporn Wattanathorn<sup>1,2</sup>, Waraporn Mahasap<sup>1</sup>

<sup>1</sup>Res. Inst. For HHP&HP, Khon Kaen Univ., Thailand, <sup>2</sup>Physiol. Dept, Fac. Med, Khon Kaen Univ., Thailand

### PC0607 Fish oil ameliorates cognitive impairment by suppressing hippocampal inflammation and amyloid- $\beta$ deposition

Sachiko Okue<sup>1</sup>, Mai Takahashi<sup>2</sup>, Riku Orihara<sup>2</sup>, Eimi Ishikawa<sup>2</sup>, Ayako Ueno<sup>2</sup>, Takashi Saito<sup>3</sup>, Takaomi C. Saido<sup>3</sup>, Yori Ozaki-Masuzawa<sup>2</sup>, Takashi Hosono<sup>1,2</sup>, Taiichiro Seki<sup>1,2</sup>

<sup>1</sup>Dept. of Appl. Life Sci., Grad. Sch. of Biores. Sci., Nihon Univ., Japan, <sup>2</sup>Dept. of Chem. and Life sci., Coll. of Biores. Sci., Nihon Univ., Japan, <sup>3</sup>RIKEN Cent. for Brain Sci., Japan

**PC0608 An adequate amount of high-fat diet improves stress-induced social avoidance behavior**Airi Otsuka<sup>1</sup>, Tetsuya Shiuchi<sup>2</sup><sup>1</sup>Dept. of Life Sci., Kindai Univ., Japan, <sup>2</sup>Dept. Integ. Physiol., Inst. Biomed. Sci., Tokushima Univ. Grad. Sch., Japan**PC0609 Peptides from hydrolysate of lantern fish (*Benthosema pterotum*) against oxidative stress induced neurotoxicity on human neuroblastoma SH-SY5Y cells *in vitro***Huey-Jine Chai<sup>1</sup>, Chang-Jer Wu<sup>3</sup>, Po-Hsuan Chen<sup>1</sup>, June-Ru Chen<sup>2</sup>, Bonnie Sun Pan<sup>3</sup><sup>1</sup>Seafood Technol. Div., Fish. Res. Inst., Council of Agric., Taiwan, <sup>2</sup>Fish. Res. Inst., Council of Agric., Taiwan, <sup>3</sup>Dept. of Food Sci., Natl. Taiwan Ocean Univ., Taiwan**PC0610  $\beta$ -Lactolin, a novel whey-derived peptide, improves memory retrieval in a clinical trial and prevents Alzheimer's disease in preclinical studies**Yasuhiro Anjo<sup>1,2</sup>, Rena Ohya<sup>1</sup>, Masahiro Kita<sup>1</sup>, Satoshi Umeda<sup>3</sup>, Hiroyuki Nakayama<sup>2</sup><sup>1</sup>Res. Lab. for Health Sci and Food Tech., Kirin Holdings, Japan, <sup>2</sup>Grad. Sch. of Agric. and Life Sci., the Univ. of Tokyo, Japan, <sup>3</sup>Dep. Psychol., Keio Univ., Japan**PC0611 Effect of lactononadecapeptide derived from casein hydrolysate on memory in healthy adults**Asako Kusumi<sup>1</sup>, Kazuhito Ohsawa<sup>1</sup>, Koki Sato<sup>1,2</sup>, Yasunori Nakamura<sup>1</sup>, Satoshi Miyata<sup>3</sup>, Kotaro Hashimoto<sup>3</sup>, Kohei Seki<sup>3</sup>, Ryuzo Hanada<sup>4</sup>, Masato Abe<sup>5</sup><sup>1</sup>Core Technol. Lab., Asahi Quality and Innovations, Ltd., Japan, <sup>2</sup>Products Dev. Dept., Asahi Calpis Wellness Co., Ltd., Japan, <sup>3</sup>Res. and Dev. Headquarters, Asahi Group Foods, Japan, <sup>4</sup>Souseikai Sumida Hosp., Japan, <sup>5</sup>Sakura Life Clinic, Japan**PC0612 Effects of pork protein oxidation on redox status, inflammation and learning and memory gene expression in the hippocampus of mice**Bowen Li<sup>1,2</sup>, Yueting Ge<sup>2</sup>, Shiman Lin<sup>2</sup>, Yuge Jiang<sup>2</sup>, Le Han<sup>2</sup>, Yonghui Shi<sup>1,2</sup>, Guowei Le<sup>1,2</sup><sup>1</sup>The State Key Lab. of Food Sci. and Technol., Jiangnan Univ., China, <sup>2</sup>Cent. for Food Nutr. and Functional Food Eng., Sch. of Food Sic. and Tech. Jiangnan Univ., China**PC0613 Protective effects of tangeretin and its derivatives against methylglyoxal-induced cytotoxicity in human neuroblastoma SH-SY5Y cells**Yue-Jhu Chen<sup>1</sup>, Yun-Xuan Zhang<sup>1</sup>, Yi-Lin Zheng<sup>1</sup>, Chi-Tang Ho<sup>2</sup>, Hui-Yun Tsai<sup>3</sup>, Yu-Kuo Chen<sup>1,4</sup><sup>1</sup>Dept. of Food Sci., Natl. Pingtung Univ. of Sci. and Technol., Taiwan, <sup>2</sup>Dept. of Food Sci., Rutgers Univ., USA, <sup>3</sup>Dept. of Nutr. and Health Sci., Fooyin Univ., Taiwan, <sup>4</sup>Executive Master of Food Biotechnol., Natl. Pingtung Univ. of Sci. and Technol., Taiwan**PC0614 *In vivo* study of the protective activity of  $\alpha$ -tocotrienol against methylglyoxal-induced Alzheimer-like cognitive impairment**Fang-Yu Lin<sup>1</sup>, Han-Wei Liao<sup>1</sup>, Yun-Xuan Zhang<sup>1</sup>, Chung S. Yang<sup>2</sup>, Yu-Kuo Chen<sup>1</sup>, Hui-Yun Tsai<sup>3</sup><sup>1</sup>Dept. of Food Sci., Natl. Pingtung Univ. of Sci. and Technol., Taiwan, <sup>2</sup>Dept. of Chemi. Biol., Rutgers Univ., USA, <sup>3</sup>Dept. of Nutr. and Health Sci., Fooyin Univ., Taiwan

**PC0615 Effect of Maillard reaction products derived from dried tomato on *C. elegans* lifespan**

Bagoudou Abdel Fawaz<sup>1</sup>, Kanako Matsumoto<sup>1</sup>, Supatta Chawalitpong<sup>1</sup>, Hyun Young Park<sup>2</sup>, Dhiraj A. Vatterm<sup>2</sup>, Soichiro Nakamura<sup>1</sup>, Shigeru Katayama<sup>1,3</sup>

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<sup>3</sup>Div. of Biomol. Innov, Biomed. Inst., Shinshu Univ., Japan

**C) Functions and Mechanisms: Cancer Chemoprevention**

**PC0701 Alkaline hydrolysates of ginseng extract to enhance cancer chemoprevention activity**

Wei-Sheng Lin<sup>1</sup>, Nai-Wen Mei<sup>2</sup>, Min-Hsiung Pan<sup>1</sup>

<sup>1</sup>Inst. of Food Sci. and Technol., Natl. Taiwan Univ., Taiwan, <sup>2</sup>GINCARE Int'l Enterprises Co., Ltd., Taiwan

**PC0702 ADA-07 suppresses solar ultraviolet-induced skin carcinogenesis by directly inhibiting TOPK**

Qiushi Wang, Tianshun Zhang, Ge Gao, Zigang Dong

The Hormel Inst., Univ. of Minnesota, USA

**PC0703 Effects of carnosine on colon carcinogenesis in mice**

Jia-Huei Li<sup>1</sup>, Hsin-Ying Kuo<sup>1</sup>, Ya-Ting Chen<sup>2</sup>, Chih-Chung Wu<sup>3</sup>, Shu-Ling Hsieh<sup>1</sup>

<sup>1</sup>Dept. of Seafood Sci., Natl. Kaohsiung Univ. of Sci. and Technol., Taiwan, <sup>2</sup>Coll. of Hydrosphere Sci., Natl. Kaohsiung Univ. of Sci. and Technol., Taiwan, <sup>3</sup>Dept. of Food and Nutr., Providence Univ., Taiwan

**PC0704 Anticancer activity in Indian Ayurvedic herb, Ashwagandha: Computational and experimental evidence**

Sunil Kaul<sup>1</sup>, Yue Yu<sup>1</sup>, Jaspreet Kaur Dhanjal<sup>1</sup>, Durai Sundar<sup>2</sup>, Renu Wadhwa<sup>1</sup>

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**PC0705 Honey bee propolis: Functional characterization and mechanism of action of anticancer and anti-stress activities**

Renu Wadhwa<sup>1</sup>, Priyanshu Bhargava<sup>1</sup>, Ashish Kaul<sup>2</sup>, Yoshiyuki Ishida<sup>3</sup>, Keiji Terao<sup>3</sup> Sunil Kaul<sup>1</sup>

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**PC0706 Antimutagenicity of *Phyllanthus emblica* fruit extract and its partially purified fractions in *Salmonella* mutation assay**

Chonikarn Singai<sup>1</sup>, Romteera Kitichaiworakul<sup>1</sup>, Charatda Punvittayagul<sup>2,3</sup>, Rawiwan Wongpoomchai<sup>1,3</sup>

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- PC0707 Synergistic chemopreventive effects of mixed sesame and orange seed extract of on diethylnitrosamine-induced hepatocarcinogenesis in rats**  
Napaporn Khuangphram<sup>1</sup>, Prachya Kongtawelert<sup>1</sup>, Arpamas Charikornkul<sup>1</sup>, Rawiwan Wongpoomchai<sup>1,2</sup>  
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- PC0708 Curcumin may suppress cancer cell proliferation through ATP depletion**  
Ayako Furukawa, Satoki Suihara, Rina Takuwa, Akari Ishisaka, Akira Murakami  
 Dept. of Food Sci. and Nutr, Sch. of Hum. Sci. and Environ., Univ. of Hyogo, Japan
- PC0709 Antioxidant and antiproliferation of young rice leaves (RD6 and BGR)**  
Visessakseth So<sup>1,3</sup>, Wipawee Thukhammee<sup>2,3</sup>, Jintanaporn Wattanathorn<sup>2,3</sup>, Natthida Weerapreeyakul<sup>3,4</sup>  
<sup>1</sup>Grad. Sch. (Pharmaceutical Sci.), Fac. of Pharm. Sci., Khon Kaen Univ., Thailand, <sup>2</sup>Dept. of Physiol., Fac. of Med., Khon Kaen Univ., Thailand, <sup>3</sup>Human High Performance and Health Promotion (HHP&HP) Res. Inst., Khon Kaen Univ., Thailand, <sup>4</sup>Div. of Pharm. Chem., Fac. of Pharm. Sci., Khon Kaen Univ., Thailand
- PC0710 Effect of red yeast (*Sporidiobolus pararoseus*) on aflatoxin B1 induced mutagenesis *in vitro* and *in vivo* models**  
Romteera Kittichaiworakul<sup>1</sup>, Sirinya Taya<sup>2</sup>, Chonikarn Singai<sup>1</sup>, Thanongsak Chaiyaso<sup>3</sup>, Rawiwan Wongpoomchai<sup>1,4</sup>  
<sup>1</sup>Dept. Biochem., Fac. Med., Chiang Mai Univ., Thailand, <sup>2</sup>Sci. Tech. Res. Inst., Chiang Mai Univ., Thailand, <sup>3</sup>Dept. Biotechnol., Fac. Agro-Ind., Chiang Mai Univ., Thailand, <sup>4</sup>Func. Food Res. Cen. Well-Being., Chiang Mai Univ., Thailand
- PC0711 Glutelin and its hydrolysate of color rice bran attenuated formation of preneoplastic lesions in liver and colon of carcinogens initiated rats**  
Aroonrat Pharapirom<sup>1</sup>, Akkasit Jongjareonrak<sup>2</sup>, Phatthawin Lengkidworrapihat<sup>1,3</sup>, Kenji Sato<sup>4</sup>, Rawiwan Wongpoomchai<sup>1,5</sup>  
<sup>1</sup>Dept. of Biochem., Fac. of Med., Chiang Mai Univ., Thailand, <sup>2</sup>Dept. of Food Eng., Fac. of Agro-ind., Chiang Mai Univ., Thailand, <sup>3</sup>Dept of Anim. and Aquat. Sci., Fac. of Agric., Chiang Mai Univ., Thailand, <sup>4</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>5</sup>Func. Food Res. Cen. Well-Being, Chiang Mai Univ., Thailand
- PC0712 *Lactobacillus fermentum* ameliorates colitis-associated tumorigenesis by modulating gut microbiome**  
Ya-Chun Chou, Pin-Yu Ho, Min-Hsiung Pan  
 Inst. of Food Sci. and Technol., Natl. Taiwan Univ., Taiwan
- PC0713 A possibility of tocotrienol as a cancer chemopreventative agent in malignant mesothelioma**  
Kakeru Kono<sup>1,3</sup>, Akari Yoshida<sup>3</sup>, Momoka Fusegi<sup>1</sup>, Daiki Endo<sup>1</sup>, Tsunetaka Arai<sup>1</sup>, Masako Ota<sup>2,3</sup>, Tomohiro Yano<sup>1,3</sup>  
<sup>1</sup>Grad. Sch. of Food and Nutr. Sci., Toyo Univ., Japan, <sup>2</sup>Dept. of Nutr. and Health Sci., Toyo Univ., Japan, <sup>3</sup>Res. Inst. for Life Innov., Toyo Univ., Japan

- PC0714 Camphorataimide B, a synthesized maleimide derivative, induces apoptosis in human hepatocellular carcinoma cells**  
Yun-Ching Chang<sup>1</sup>, Dai-Jung Chung<sup>2</sup>, Chau-Jong Wang<sup>1</sup>  
<sup>1</sup>Dept. of Health Diet and Ind. Manage., Health Care and Manage. Coll., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Inst. of Biochem., Microbiol. and Immunol., Med. Coll., Chung Shan Med. Univ., Taiwan
- PC0715 The physiological activities of microalgae –Focusing on radical scavenging activity and cytotoxicity against cancer cells–**  
Akihiro Ohara<sup>1,2</sup>, Daisuke Betto<sup>1</sup>, Mafumi Kawamura<sup>2</sup>, Yuji Yamaguchi<sup>3</sup>, Ken-ichiro Minato<sup>1,2</sup>, Hiroyuki Takenaka<sup>3</sup>  
<sup>1</sup>Div. of Agric. Sci., Grad. Sch. of Agric, Meijo Univ., Japan, <sup>2</sup>Fac. of Agric., Meijo Univ., Japan, <sup>3</sup>MAC Gifu Res. Inst., Microalgae Co., Japan
- PC0716 Anti-metastatic effects and chemical properties of polysaccharides isolated from fermented ginseng leaves**  
Sue Jung Lee, Hye-Ryung Park, Kwang-Soon Shin  
Dept. of Food Sci. and Biotechnol., Kyonggi Univ., Korea
- PC0717 Chemopreventive effect of natural dietary compounds on xenobiotic-induced carcinogenesis**  
Min-Hsiung Pan<sup>1</sup>, Chia-Ching Wu<sup>1</sup>, Chi-Tang Ho<sup>2</sup>  
<sup>1</sup>Inst. of Food Sci. and Technol., Natl. Taiwan Univ., Taiwan, <sup>2</sup>Dept. of Food Sci., Rutgers Univ., USA
- PC0718 Chemopreventive efficacy of 3'-hydroxypterostilbene on suppression of high fat diet-induced obesity promotes colitis**  
Pei-Sheng Lee<sup>1</sup>, Yi-Shiou Chiou<sup>1,2</sup>, Nagabhushanam Kalyanam<sup>3</sup>, Chi-Tang Ho<sup>4</sup>, Min-Hsiung Pan<sup>1</sup>  
<sup>1</sup>Inst. of Food Sci. and Technol., Natl. Taiwan Univ., Taiwan, <sup>2</sup>Tsinghua Berkeley Shenzhen Insti. (TBSI), Tsinghua Univ., China, <sup>3</sup>Sabinsa Co., USA, <sup>4</sup>Dept. of Food Sci., Rutgers Univ., USA
- PC0719 Evaluation of azolato-bridged dinuclear platinum (II) complexes cytotoxicity in human prostate cancer cells**  
Tasuku Arai<sup>1</sup>, Takeshi Matsunaga<sup>1</sup>, Maya Kamao<sup>2</sup>, Seiji Komeda<sup>3</sup>, Yoshihisa Hirota<sup>1</sup>  
<sup>1</sup>Dept. Biosci. & Eng., Coll. Syst. Eng. & Sci., Shibaura Inst. Technol., Japan, <sup>2</sup>Ext. Cent., Kobe Pharm. Univ., Japan, <sup>3</sup>Fac. Pharm. Sci., Suzuka Univ. Med. Sci., Japan
- PC0720 Anticancer activity and mediation of apoptosis in hepatoma carcinoma cells by ethanolic extract of Djulis and its bioactive compounds**  
Pin-Der Duh<sup>1</sup>, Dom-Gen Tu<sup>2</sup>, Chin-Chen Chu<sup>3</sup>, Shih-Ying Chen<sup>4</sup>, Charng-Cherng Chyau<sup>5</sup>, Heuy-Ling Chu<sup>1</sup>, You-Chia Wu<sup>4</sup>  
<sup>1</sup>Dept. of Food Sci. Tech., Chia Nan Univ. of Pharm. and Sci., Taiwan, <sup>2</sup>Dept. of Nuclear Med., Ditmanson Med. Found., Chia-Yi Christian Hosp. Taiwan, <sup>3</sup>Dept. of Anesthesiol., Chi Mei Med. Cent., Taiwan, <sup>4</sup>Dept. of Health and Nutr., Chia Nan Univ. of Pharm. and Sci., Taiwan, <sup>5</sup>Res. Inst. of Biotechnol., Hungkuang Univ., Taiwan

**PC0722 The potential effects/mechanisms and safety study of ent-kaurane diterpenoid extracted from *C. tonkinensis* Gagnep as an anti-lung cancer agent**

Yi-Hsuan Huang, Rong-Jane Chen

*Dept. of Food Safety / Hygiene and Risk Management, Natl. Cheng Kung Univ. Med. Coll., Taiwan*

**C) Functions and Mechanisms: Cardiovascular Health**

**PC0801 Fish oil is more potent than flaxseed oil in modulating gut microbiota and reducing trimethylamine-N-oxide (TMAO)-exacerbated atherogenesis in mice**

Zouyan He, Zhen-Yu Chen

*Food and Nutr. Sci. Programme, Sch. of Life Sci., The Chinese Univ. of Hong Kong, China*

**PC0802 Geniposidic acid promotes atrial natriuretic peptide secretion to exhibit the biological effect**

Shohei Yamaguchi<sup>1</sup>, Ryuto Takahashi<sup>2</sup>, Shingo Hosoo<sup>3</sup>, Tetsuya Hirata<sup>3</sup>, Yasuyo Yamaguchi<sup>3</sup>, Hiroo Yamasaki<sup>3</sup>, Naoto Minamino<sup>4</sup>, Kozo Nakamura<sup>2,5</sup>

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**PC0803 The effects of sulfuric odors of garlic and thier precursors on HDL-mediated cholesterol efflux from the macrophages**

Harumi Uto-Kondo<sup>1</sup>, Shiori Kawahara<sup>1</sup>, Katsunori Ikewaki<sup>2</sup>, Hitomi Kumagai<sup>3</sup>

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**PC0804 The effects of trigonelline in *Raphanus sativus* cv. Sakurajima Daikon as a functional food for humans**

Katsuko Kajiya<sup>1,2</sup>, Haruna Kawasoe<sup>2</sup>, Maho Sasaki<sup>1</sup>, Takashi Kajiya<sup>3</sup>, Yoshihiko Atsuchi<sup>3</sup>, Nobuhiko Atsuchi<sup>3</sup>, Yuji Minami<sup>1,2</sup>

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**PC0805 Anthocyanins derived from purple carrot affect on the hemodynamic changes through adrenomimetic action**

Taiki Fushimi<sup>1</sup>, Ayaka Tsutsumi<sup>2</sup>, Ryo Koizumi<sup>1</sup>, Yasuyuki Fujii<sup>1</sup>, Qing Qiang Hu<sup>2</sup>, Koichi Aizawa<sup>2</sup>, Naomi Osakabe<sup>1</sup>

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- PC0806 Purification of Angiotensin I-converting-enzyme inhibitors from a *Chlorella* hot water extract**  
Kyohei Koseki, Tomohiro Bito, Fumio Watanabe  
*Grad. Sch. of Sustainability. Sci., Tottori Univ., Japan*
- PC0807 Sea buckthorn seed oil reduces blood cholesterol and modulates gut microbiota**  
Wangjun Hao, Zhenyu Chen  
*Sch. of Life Sci., The Chinese Univ. of Hong Kong, China*
- PC0808 Effect of peony seed oil on lipid metabolism in hypercholesterolemia hamster**  
Erika Kwek, Zhen Yu Chen  
*Sch. of Life Sci., The Chinese Univ. of Hong Kong, China*
- PC0809 Anti-hypertensive effects of *Pinus densiflora* bark extract in spontaneously hypertensive rats**  
Kwan Joong Kim<sup>1,2</sup>, Eun-Sang Hwang<sup>3</sup>, Min-Jeong Kim<sup>1,2</sup>, Ji-Ho Park<sup>4</sup>, Dae-Ok Kim<sup>1,2</sup>  
<sup>1</sup>Dept. of Food Sci. and Biotechnol., Kyung Hee Univ., Korea, <sup>2</sup>Skin Biotechnol. Cent., Kyung Hee Univ., Korea, <sup>3</sup>Dept. of Gerontol., Grad. sch. of East-West Med. Sci., Kyung Hee Univ., Korea, <sup>4</sup>Dept. of East-West Med., Grad. sch. of East-West Med. Sci., Kyung Hee Univ., Korea
- PC0810 Djulis hull extracts ameliorate lipid metabolism in hamsters fed a high-fat/high-cholesterol diet**  
Yu-Yuan Shih<sup>1</sup>, Ching-Yi Kuan<sup>1</sup>, Pi-Jen Tsai<sup>1</sup>, Hui-Yun Tsai<sup>2</sup>, Yu-Kuo Chen<sup>1,3</sup>  
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## C) Functions and Mechanisms: Chronobiology

- PC0901 Dietary fish oil differentially changes serum lipids and gene expression in healthy adults depending on time of feeding**  
Tatsuya Konishi<sup>1</sup>, Yoshinori Takahashi<sup>1</sup>, Yasuhiko Shiina<sup>1</sup>, Hideaki Oike<sup>2,3</sup>, Katsutaka Oishi<sup>3,4,5</sup>  
<sup>1</sup>Cent. Res. Inst., Maruha Nichiro Co., Japan, <sup>2</sup>Food Res. Inst., NARO, Japan, <sup>3</sup>Biol. Clock Res. Group, Biomedical Res. Inst., AIST, Japan, <sup>4</sup>Dept. of Computational Biol. and Med. Sci., Grad. Sch. of Frontier Sci., Univ. of Tokyo, Japan, <sup>5</sup>Dept. of Appl. Biol. Sci., Grad. Sch. of Sci. and Technol., Tokyo Univ. of Sci., Japan
- PC0902 Inhibitory mechanism of polyphenols for the disruption of circadian clock via AhR**  
Takuya Nomura<sup>1</sup>, Tomoya Kitakaze<sup>2</sup>, Yoko Yamashita<sup>2</sup>, Hitoshi Ashida<sup>2</sup>  
<sup>1</sup>Fac. of Agric., Kobe Univ., Japan, <sup>2</sup>Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan

**PC0903 Effects of consumption-timing and fat species on body weight gain in C57BL/6 mice**

Hiroki Matsuyama<sup>1</sup>, Wataru Tanaka<sup>1</sup>, Daigo Yokoyama<sup>1</sup>, Saki Nishimura<sup>2</sup>, Shoji Matsumoto<sup>2</sup>, Takashi Sano<sup>2</sup>, Takatoshi Yamashita<sup>2</sup>, Masanobu Sakono<sup>1</sup>, Hiroyuki Sakakibara<sup>1</sup>

<sup>1</sup>Grad. Sch. of Agric., Univ. of Miyazaki, Japan, <sup>2</sup>J-Oil Mills, Inc., Japan

**PC0904 Cacao polyphenols regulate the clock gene expressions in mice**

Ken-yu Hironao, Shujiao Huang, Yuji Mitsuhashi, Hitoshi Ashida, Yoko Yamashita  
Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan

**PC0905 Diurnal variation of polyphenol amounts in sensitive plant (*Mimosa pudica* L.)**

Kanami Ino, Hiroki Matsuyama, Wataru Tanaka, Masanobu Sakono, Hiroyuki Sakakibara  
Grad. Sch. of Agric., Univ. of Miyazaki, Japan

**C) Functions and Mechanisms: Exercise and Skeletal Muscle Health****PC1001 Inhibitory effect of *Illicium verum* water extract on muscle atrophy through the regulation of protein turnover and myogenesis**

Jiheee Yoo, Changhee Kim, Jae-Kwan Hwang

Dept. of Biotechnol., Yonsei Univ., Korea

**PC1002 Oleamide rescues skeletal muscle atrophy of mice housed in small cages**

Yasuyuki Kobayashi<sup>1</sup>, Natsumi Watanabe<sup>1</sup>, Tomoya Kitakaze<sup>2</sup>, Keiichiro Sugimoto<sup>3,4</sup>, Kenji Kai<sup>1</sup>, Naoki Harada<sup>1</sup>, Ryoichi Yamaji<sup>1</sup>

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**PC1003 Preventive effect of dietary lemon peel extract containing eriocitrin on disuse muscle atrophy**

Takahito Takase<sup>1</sup>, Naoyuki Kobayashi<sup>1</sup>, Takashi Inoue<sup>1</sup>, Youichi Tsuchiya<sup>1</sup>, Rie Mukai<sup>2</sup>

<sup>1</sup>Res. and Dev. Div., Sapporo Holdings Ltd., Japan, <sup>2</sup>Dept. of Food Sci., Grad. Sch. of Tech., Ind. and Soc. Sci., Tokushima Univ., Japan

**PC1004 The effect of wheat-derived glucosylceramide on carbohydrate and protein metabolism in muscles**

Yuki Furutachi, Yutaka Miura

Dept. of Appl. Bio. Sci., Grad. Sch. of Agric., Tokyo Univ. of Agric. & Technol., Japan

**PC1005 Physical characteristics of carnosine synthase gene-deficient mice -Carnosine deficiency impairs exercise performance-**

Ai Egusa<sup>1</sup>, Nobuhiro Nakao<sup>2</sup>, Takaki Saito<sup>1</sup>, Nobuya Yanai<sup>3</sup>, Shigenobu Shiotani<sup>3</sup>, Kenichiro Sato<sup>3</sup>, Mamoru Totsuka<sup>1</sup>, Toshihide Nishimura<sup>4</sup>

<sup>1</sup>Dept. of Food Sci. and Tec., Nippon Vet. and Life Sci. Univ., Japan, <sup>2</sup>Dept. of Animal Sci., Nippon Vet. and Life Sci. Univ., Japan, <sup>3</sup>Res. div., Tokai Bussan Co. Ltd., Japan, <sup>4</sup>Dept. of Nutr., Kagawa Nutr. Univ., Japan

- PC1006 Estrogenic activity of 8-renalnaringenin improves skeletal muscle regeneration from disuse muscle atrophy by activating IGF-I/PI3K/Akt pathway**  
Rie Mukai<sup>1</sup>, Hisao Nemoto<sup>2</sup>, Junji Terao<sup>3</sup>  
<sup>1</sup>Dept. of Food Sci., Grad. Sch. of Technol., Ind. and Social Sci., Tokushima Univ., Japan, <sup>2</sup>Dept. of Pharm. Chem., Inst. of Biomed. Sci., Tokushima Univ., Japan, <sup>3</sup>Fac. of Clin. Nutr. and Dietetics Konan Women's Univ., Japan
- PC1007 Screening of compounds that suppress the transcriptional activity of FOXO1**  
Rintaro Matsuda, Takumi Onishi, Yuma Hirose, Yukino Hatazawa, Yasutomi Kamei  
Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ., Japan
- PC1008 Gangliosides in antler prevent skeletal muscle atrophy by stimulating PI3K/Akt pathway in L6 myotubes**  
Jihee Yoo, Changhee Kim, Jae-Kwan Hwang  
Dept. of Biotechnol., Yonsei Univ., Korea
- PC1009 *Chrysanthemum morifolium* extract inhibits sarcopenia through the regulation of protein turnover and mitochondrial biogenesis**  
Dowan Kwon, Changhee Kim, Jae-Kwan Hwang  
Dept. of Biotechnol., Yonsei Univ., Korea
- PC1010 Genistein and daidzein promote PGC-1 $\beta$ -mediated energy expenditure gene expression in muscle cells**  
Shiho Nakai<sup>1</sup>, Ran Uchitomi<sup>1</sup>, Rintaro Matsuda<sup>1</sup>, Takumi Onishi<sup>1</sup>, Shinji Miura<sup>2</sup>, Yukino Hatazawa<sup>1</sup>, Yasutomi Kamei<sup>1</sup>  
<sup>1</sup>Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ., Japan, <sup>2</sup>Grad. Sch. of Nutr. and Environ. Sci., Univ. of Shizuoka, Japan
- PC1011 Search for factors that define properties of fast-type myofibers in muscle satellite cells**  
Kaho Takigawa, Mariko Fujita, Yasutomi Kamei  
Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ., Japan
- PC1012 Identification of atrophy-related FOXO1-target genes in skeletal muscle of mice**  
Mamoru Oyabu, Kaho Takigawa, Yasutomi Kamei  
Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ., Japan
- PC1013 Analysis of metabolic changes of C2C12 myoblasts induced by the transcription factor FOXO1**  
Mariko Fujita, Rintaro Matsuda, Ran Uchitomi, Mamoru Oyabu, Yukino Hatazawa, Yasutomi Kamei  
Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ., Japan

**PC1014 Extracellular transglutaminase 2 induces myotube hypertrophy through G protein-coupled receptor 56**

Miki Yoshikawa<sup>1</sup>, Tomoya Kitakaze<sup>2</sup>, Naohiro Kimura<sup>1</sup>, Yoshiyuki Ogata<sup>1</sup>, Takahiro Ishikawa<sup>3</sup>, Yoko Yamashita<sup>2</sup>, Hitoshi Ashida<sup>2</sup>, Naoki Harada<sup>1</sup>, Ryoichi Yamaji<sup>1</sup>

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**PC1015 Effects of glucosyl hesperidin intake on aerobic exercise capacity in rats**

Suminori Nagayama<sup>1</sup>, Shoichi Komine<sup>2</sup>, Norie Arai<sup>3</sup>, Shin Endo<sup>3</sup>, Hajime Ohmori<sup>2</sup>

<sup>1</sup>Grad. Sch. of Comprehensive Human Sci., Univ. of Tsukuba, Japan, <sup>2</sup>Fac. of Health and Sport Sci., Univ. of Tsukuba, Japan, <sup>3</sup>R&D Div., Hayashibara Co., Ltd., Japan

**PC1016 Endurance training and administration of  $\beta$ -hydroxy- $\beta$ -methylbutyrate and black ginger prevent sarcopenia**

Hajime Ohmori<sup>1</sup>, Kai Aoki<sup>2</sup>, Masaki Konno<sup>2</sup>, Katsunari Honda<sup>3</sup>, Takuya Abe<sup>4</sup>, Takeshi Nagata<sup>5</sup>, Masaaki Takehara<sup>5</sup>

<sup>1</sup>Fac. of Health & Sport Sci., Univ. of Tsukuba, Japan, <sup>2</sup>Grad. Sch. of Comprehensive Human Sci., Univ. of Tsukuba, Japan, <sup>3</sup>Sch. of Physical Education, Health and Sport Sci., Univ. of Tsukuba, Japan, <sup>4</sup>Zenyaku Hanbai Co., Ltd., Japan, <sup>5</sup>Zenyaku Kogyo Co., Ltd., Japan

**C) Functions and Mechanisms: Exosome and microRNA****PC1101 Delphinidin suppresses muscle atrophy and upregulates miR-23a in skeletal muscle and plasma**

Yuki Marugame<sup>1</sup>, Motoki Murata<sup>1,2</sup>, Megumi Goto<sup>1</sup>, Yoshinori Fujimura<sup>1</sup>, Hirofumi Tachibana<sup>1</sup>

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**C) Functions and Mechanisms: Gastrointestinal Health and Diseases****PC1201 Effect of *Lactobacillus plantarum* Q180 on blood triglyceride levels and intestinal environment : a randomized, double-blind, placebo-controlled study**

Ji Yeon Kim<sup>1</sup>, Yeeun Park<sup>1</sup>, Yeji Hyun<sup>1</sup>, Humna Liaqat<sup>1</sup>, Kyeong Jin Kim<sup>1</sup>, In Suk Choi<sup>2</sup>, Byoung-Kook Kim<sup>2</sup>, You-Il Kim<sup>2</sup>, Ji-Hee Kim<sup>2</sup>, Kyungwon Shim<sup>3</sup>

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**PC1202 Site-specific delivery of nucleic acid in the gastrointestinal tract via oral administration of multicompartmental capsules**

Kyungjick Yang<sup>1</sup>, Taehyung Kim<sup>1</sup>, Jeong Un Kim<sup>1</sup>, Il-Hwa Hong<sup>2</sup>, Jiyong Park<sup>1</sup>, Young Hoon Roh<sup>1</sup>

<sup>1</sup>Dept. of Biotechnol., Coll. of Life Sci. and Biotechnol., Yonsei Univ., Korea, <sup>2</sup>Dept. of Vet. Pathol., Coll. of Vet. Med., Gyeongsang Natl. Univ., Korea

- PC1203 The effect of pectin from persimmon on small intestinal villus morphology change and nutrient absorption**  
Saki Gotoh<sup>1</sup>, Kenichi Ito<sup>2</sup>, Maki Ohno<sup>2</sup>, Kohji Kitaguchi<sup>1</sup>, Tomio Yabe<sup>1,3</sup>  
<sup>1</sup>United Grad. Sch. of Agric. Sci., Gifu Univ., Japan, <sup>2</sup>Ichimaru Pharcos Co., Ltd., Japan, <sup>3</sup>G-CHAIN, Japan
- PC1204 An intestinal immune system-modulating activity of polysaccharide from young barley leaves and its structural characterization**  
Hye-Ryung Park<sup>1</sup>, Sue Jung Lee<sup>1</sup>, Ho-Young Park<sup>2</sup>, Kwang-Soon Shin<sup>1</sup>  
<sup>1</sup>Dept. of Food Sci. and Biotechnol., Kyonggi Univ., Korea, <sup>2</sup>Res. Div. of Food Functionality, KFRI, Korea
- PC1205 Oral administration of rice resistant protein inhibits the expression of the regenerating islet-derived protein 3 family in mice**  
Ayane Mikami<sup>1</sup>, Tasuku Ogita<sup>2</sup>, Kanna Matsumoto<sup>3</sup>, Takeshi Shimosato<sup>2</sup>  
<sup>1</sup>Dept. of Biomed. Eng., Grad. Sch. of Med. Sci. Tec., Shinshu Univ., Japan, <sup>2</sup>Dept. of Biomol. Innov., Inst. for Biomed. Sci., Shinshu Univ., Japan, <sup>3</sup>Dept. of Agric., Shinshu Univ., Japan
- PC1206 Partially hydrolyzed guar gum on fecal characteristics and gut microbiota – A randomised, double-blind, placebo-controlled, parallel-group study**  
Zenta Yasukawa<sup>1,2</sup>, Ryo Inoue<sup>3</sup>, Makoto Ozeki<sup>1,2</sup>, Tsutomu Okubo<sup>1,2</sup>, Tomohisa Takagi<sup>4</sup>, Akira Honda<sup>5</sup>, Yuji Naito<sup>4</sup>  
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- PC1207 Dietary fermentable fibers increase intestinal heat shock protein70 through short chain fatty acids production**  
Adesina Precious Adedayo<sup>1</sup>, Takuya Suzuki<sup>1,2</sup>  
<sup>1</sup>Dept. of Biofunctional Sci. and Technol., Grad. Sch. of Biosphere Sci., Hiroshima Univ., Japan, <sup>2</sup>Program of Food Agrilife Sci., Grad. Sch. of Integrated Sci. for Life, Hiroshima Univ., Japan
- PC1208 Gut microbiota modulation by vitamin A fortification in Muslim lactating women and infants**  
Lukman Azis<sup>1</sup>, Siwaporn Pinkaew<sup>1</sup>, Santad Wichienchot<sup>2</sup>  
<sup>1</sup>Dept. of Food Sci. and Nutr., Fac. of Sci. and Tech., Prince of Songkla Univ., Thailand, <sup>2</sup>IGS-Nutraceutical and Functional Food, Prince of Songkla Univ., Thailand
- PC1209 Effect of aging with changes of chemokine production in intestines on intentional microbiota**  
Ryota Igarashi<sup>1</sup>, Shinji Fukuda<sup>2</sup>, Hideyuki Nagafusa<sup>3</sup>, Haruko Takeshita<sup>4</sup>, Kazutoshi Sayama<sup>5</sup>  
<sup>1</sup>Grad. Sch. of Agric., Shizuoka Univ., Japan, <sup>2</sup>Inst. Adv. Biosci. Keio Univ., Japan, <sup>3</sup>Rese. Facility of health pro., Tokoha Univ., Japan, <sup>4</sup>Coll. of Edu. Academic Inst. Shizuoka Univ., Japan, <sup>5</sup>Coll. of Agric. Academic Inst. Shizuoka Univ., Japan

**PC1210 Study on the protective effect of water extract of clam on indomethacin-induced gastric injury in rats**

Yu-Jie Zhao<sup>1</sup>, Chien-Hsing Chiang<sup>2</sup>, Chih-Chiang Tsai<sup>2</sup>, Yu-Kuo Chen<sup>1,3</sup>

<sup>1</sup>Dept. of Food Sci., Natl. Pingtung Univ. of Sci. and Technol., Taiwan, <sup>2</sup>Li Chuan Aquafarm Co. Ltd., Taiwan, <sup>3</sup>Natl. Pingtung Univ. of Sci. and Technol., Taiwan

**PC1211 Yeast  $\beta$ -glucan encapsulated methotrexate for synergistically treating inflammatory bowel disease**

Ying Sun, Xiaojuan Xu

Coll. of Chem. and Mol. Sci., Wuhan Univ., China

**PC1212 Effects of spontaneous exercise on NASH pathology in the CDAHFD-fed mouse model**

Yuya Kitada<sup>1</sup>, Shiori Ikeda<sup>1</sup>, Atsushi Miura<sup>1,2</sup>, Yori Ozaki-Masuzawa<sup>2</sup>, Takashi Hosono<sup>1,2</sup>, Taichiro Seki<sup>1,2</sup>

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**PC1213 Intra-rectal ethanol administration for colitis predisposition in a mouse model**

Fang-Yi Chu<sup>1</sup>, Min-Chun Chang<sup>1</sup>, David Pei-Cheng Lin<sup>2</sup>, Han-Hsin Chang<sup>1</sup>

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**PC1214 High serum phospholipid dihomo- $\gamma$ -linoleic acid level is associated with NAFLD in the Japanese population: a cross-sectional study**

Zhe Jiang<sup>1</sup>, Takuya Hayashi<sup>1</sup>, Kentaro Kashima<sup>1</sup>, Kayo Kurotani<sup>2,3</sup>, Bungo Shirouchi<sup>1</sup>, Tetsuya Mizoue<sup>2</sup>, Masao Sato<sup>1</sup>

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**C) Functions and Mechanisms: Metabolic Syndrome, Obesity and Diabetes****PC1301 Possible antiobesity effects of protease-A digested egg crude chalaza hydrolysates**

Sheng-Yao Wang<sup>1</sup>, Jr-Wei Chen<sup>1,2</sup>, Yi-Ling Lin<sup>1</sup>, Yi-Hsieng Samuel Wu<sup>1</sup>, Yi-Chen Chen<sup>1</sup>

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**PC1302 Strawberry decrease oxidative stress in high-fat diet-induced obese and diabetic mice**

Manabu Wakagi, Masao Goto, Naoto Hashimoto, Hiroyuki Nakagawa, Yuko Takano-Ishikawa

Food Res. Inst., NARO, Japan

- PC1303 Ameliorative effects of Alkylresorcinols for a mouse model of nonalcoholic steatohepatitis**  
Youhei Takagi<sup>1</sup>, Yumika Hiraga<sup>1</sup>, Akie Kurashina<sup>2</sup>, Masayoshi Takayanagi<sup>2</sup>, Shinjiro Imai<sup>1</sup>  
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- PC1304 Effect of astaxanthin on the inhibition of adipogenesis in 3T3-L1 adipocytes**  
 Mei-Chih Tsai<sup>1</sup>, Wei-Tang Chang<sup>2</sup>, Chin-Lin Hsu<sup>1</sup>  
<sup>1</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Nutr. and Health Nutr., Chinese Culture Univ., Taiwan
- PC1305 Study on the relationship between fatty acid metabolism and thermogenic function of white adipocytes**  
Mari Iwase<sup>1</sup>, Soshi Tokiwa<sup>1</sup>, Shigeto Seno<sup>2</sup>, Takako Mukai<sup>3</sup>, Haruya Takahashi<sup>1</sup>, Wataru Nomura<sup>1</sup>, Huei-Fen Jheng<sup>1</sup>, Tatsuya Kusudo<sup>3</sup>, Naoki Osato<sup>2</sup>, Hideo Matsuda<sup>2</sup>, Kazuo Inoue<sup>1</sup>, Teruo Kawada<sup>1,4</sup>, Tsuyoshi Goto<sup>1,4</sup>  
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- PC1306 Effect of paternal obesity and maternal nutritional restriction during pregnancy on glucose and lipid metabolism in offspring.**  
Eri Nakamura, Ayaka Ishii, Ayaka Ozawa, Yukari Egashira, Shizuka Hirai  
 Lab. of Food Nutr., Grad. Sch. of Hort., Chiba Univ., Japan
- PC1307 Calebin-A improved adipose inflammation and insulin resistance in diet-induced obesity**  
Ching-Shu Lai<sup>1</sup>, Jing-Ru Lin<sup>1</sup>, Mei-Ling Tsai<sup>1</sup>, Min-Hsiung Pan<sup>2</sup>, Chi-Tang Ho<sup>3</sup>  
<sup>1</sup>Dept. of Sea. Sci., Nat. Kaohsiung. Univ. of Sci. and Tech., Taiwan, <sup>2</sup>Inst. of Food. Sci. and Tech., Nat. Taiwan Univ., Taiwan, <sup>3</sup>Dept. of Food. Sci., Rutgers Univ., USA
- PC1308 Tetrahydrocurcumin suppression of DEHP promoted high fat diet induced nonalcoholic fatty liver disease and its molecular mechanisms of action**  
 Yu-Chi Chu<sup>1</sup>, Mei-Ling Tsai<sup>1</sup>, Chi-Tang Ho<sup>2</sup>, Ching-Shu Lai<sup>1</sup>  
<sup>1</sup>Dept. of Sea. Sci., Nat. Kaohsiung. Univ. of Sci. and Tech., Taiwan, <sup>2</sup>Dept. of Food. Sci., Rutgers Univ., USA
- PC1309 The effect of Tetrahydrocurcumin inhibits TNF- $\alpha$  induced insulin resistant**  
Yi-Zhen Tsai<sup>1</sup>, Chi-Tang Ho<sup>2</sup>, Min Hsiung Pan<sup>3</sup>, Ching-Shu Lai<sup>1</sup>  
<sup>1</sup>Dept. of Sea. Sci., Nat. Kaohsiung. Univ. of Sci. and Tech., Taiwan, <sup>2</sup>Dept. of Food. Sci., Rutgers Univ., USA, <sup>3</sup>Inst. of Food. Sci. and Tech., Nat. Taiwan Univ., Taiwan
- PC1310 Protective effect of functional cider fermented from buni fruits (*Antidesma bunius*) against metabolic syndrome**  
 Jennifer Lhemana<sup>1</sup>, Yanti<sup>1,2</sup>, Bibiana Widiyati Lay<sup>1</sup>, Raymond Rubianto Tjandrawinata<sup>1</sup>  
<sup>1</sup>Master of Sci. in Biotechnol. Program, Atma Jaya Catholic Univ. of Indonesia, Indonesia, <sup>2</sup>Dept. of Food Technol., Atma Jaya Catholic Univ. of Indonesia, Indonesia

- PC1311 Effects of hot-water extract from unripe mango fruits consumption on blood lipid levels in ApoE deficient mice**  
Hayato Tajiri<sup>1</sup>, Kaede Hidaka<sup>1</sup>, Wataru Tanaka<sup>1</sup>, Hiroki Matsuyama<sup>1</sup>, Yu Suzuki<sup>2</sup>, Noriyuki Miyoshi<sup>2</sup>, Shinji Fukii<sup>3</sup>, Takuya Sugita<sup>3</sup>, Kenta Hidaka<sup>4</sup>, Yasushi Matsuura<sup>5</sup>, Chizuko Yukizaki<sup>5</sup>, Masanobu Sakono<sup>1</sup>, Hiroyuki Sakakibara<sup>1</sup>  
<sup>1</sup>Dept. of Agric., Univ. of Miyazaki, Japan, <sup>2</sup>Grad. Div. of Nutr. and Environ. Sci., Univ. of Shizuoka, Japan, <sup>3</sup>Agric. Administration Section, Japan, <sup>4</sup>Star-Fruits Co., Ltd., Japan, <sup>5</sup>Miyazaki Pref. Food Res. and Dev. Cent., Japan
- PC1312 Studies on the body fat reducing effect of quercetin glycosides**  
Sumire Kishimoto, Yasujiro Morimitsu  
 Dept. of Food Chem., Ochanomizu Univ., Japan
- PC1313 Search for vegetable-derived components that inhibit sodium/glucose cotransporter 1 (SGLT1)**  
Kazutaka Yoshida<sup>1</sup>, Daito Suzuki<sup>2</sup>, Koichi Aizawa<sup>1</sup>, Hiroyuki Suganuma<sup>1</sup>, Hideo Satsu<sup>2</sup>  
<sup>1</sup>Nature & Wellness Res. Dept., Innovation Div., KAGOME Co., Ltd., Japan, <sup>2</sup>Dept. of Biotechnol., Maebashi Inst. Technol., Japan
- PC1314 Analysis of Kelakai (*Stenochlaena palustris*) and the relationship of DPPH antioxidative and lipase inhibitory activity**  
Evelyn Antoinette Halim<sup>1</sup>, Eisuke Kato<sup>2</sup>, Della Rahmawati<sup>1</sup>, Maria Gunawan Puteri<sup>1</sup>, Yanetri Asi Nion<sup>3</sup>  
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- PC1315 Bisacurone derived from turmeric suppresses hepatic lipid accumulation**  
Hitoshi Ashida, Xiaokuo Tian, Tomoya Kitakaze, Yoko Yamashita  
 Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan
- PC1316 Protective effect of *Labisia pumila* against diabetic neuropathy in an experimental rat model**  
Nazmun Nahar, Suhaila Mohamed  
 Inst. of Biosci., Univ. Putra Malaysia, Malaysia
- PC1317 The effect of a diet containing fish oil during pregnancy and lactation on the insulin secretory capacity of offspring**  
Kota Torii, Tsuyoshi Tsuduki  
 Grad. Sch. of Agric., Tohoku Univ., Japan
- PC1318 Effect of maternal nutritional restriction during pregnancy and pacific krill oil intake during lactation on glucose and lipid metabolism in offspring**  
Ayaka Ozawa<sup>1</sup>, Eri Nakamura<sup>1</sup>, Kanami Kawasoe<sup>2</sup>, Ryoko Koizumi<sup>2</sup>, Ayaka Ishii<sup>1</sup>, Yukari Egashira<sup>1</sup>, Shizuka Hirai<sup>1</sup>  
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- PC1319 Inhibition of pancreatic lipase by a glycosylated phenolic acid from aqueous isolate of *Solanum tuberosum* L.**  
Katimbwa Dorsilla Anono, JinSung Ma, Dong-yup Hahn, Jinkyu Lim  
*Sch. of Food Sci. and Biotechnol., Coll. of Agric. Biotechnol. and Life Sci., Kyungpook Natl. Univ., Korea*
- PC1320 Analysis of deep sea water on lipid accumulation and inflammation in high fat diet-induced obese hamster**  
Min-Chun Chang<sup>1</sup>, Shu-Ya Wu<sup>1</sup> Chu-Chyn Ou<sup>1</sup> David Pei-Cheng Lin<sup>2</sup>, Han-Hsin Chang<sup>1</sup>  
<sup>1</sup>*Dept. of Nutr., Chung Shan Med. Univ., Taiwan*, <sup>2</sup>*Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan*
- PC1321 Pyroglutamylleucine improved the increase of blood glucose levels induced by high-fat diet without improving high-fat diet-induced hepatitis**  
Satoshi Miyauchi, Kenji Sato  
*Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan*
- PC1322 Possible lipolysis mechanisms of catechins *via* ATP consumption**  
Satoki Suihara, Akari Ishisaka, Akira Murakami  
*Dept. of Food Sci. and Nutr., Sch. of Human Sci. and Environ., Univ. of Hyogo, Japan*
- PC1323 Artepillin C induces thermogenesis in inguinal white adipose tissues of mice in association with a creatine metabolism-related thermogenic pathway**  
Sho Nishikawa<sup>1</sup>, Takuma Hyodo<sup>1</sup>, Hiroki Aoyama<sup>1</sup>, Ryo Miyata<sup>2</sup>, Shigenori Kumazawa<sup>2</sup>, Takanori Tsuda<sup>1</sup>  
<sup>1</sup>*Coll. of Biosci. and Biotech., Chubu Univ., Japan*, <sup>2</sup>*Dept. of Food and Nutr. Sci., Univ. of Shizuoka, Japan*
- PC1324 Effect of arginyl-fructosyl-glucose (AFG) on methylglyoxal-induced insulin resistance in HepG2 cells**  
Tzu-Yu Wang<sup>1</sup>, Kun-Tai Huang<sup>1</sup>, Chi-Tang Ho<sup>2</sup>, Hui-Yun Tsai<sup>3</sup>, Yu-Kuo Chen<sup>1,4</sup>  
<sup>1</sup>*Dept. of Food Sci., Natl. Pingtung Univ. of Sci. and Technol., Taiwan*, <sup>2</sup>*Dept. of Food Sci., Rutgers Univ., USA*, <sup>3</sup>*Dept. of Nutr. and Health Sci., Fooyin Univ., Taiwan*, <sup>4</sup>*Food Biotechnol., Natl. Pingtung Univ. of Sci. and Technol., Taiwan*
- PC1325 Lipid-lowering effect of water fraction in ethanolic extract from gac fruit aril on diet-induced hyperlipidemia in hamsters**  
Ya-Ting Yang<sup>1</sup>, Yu-Yuan Shih<sup>1</sup>, Chi-I Chang<sup>2</sup>, Hui-Yun Tsai<sup>3</sup>, Yu-Kuo Chen<sup>1,4</sup>  
<sup>1</sup>*Dept. of Food Sci., Natl. Pingtung Univ. of Sci. and Technol., Taiwan*, <sup>2</sup>*Dept. of Biol. Sci. and Technol., Natl. Pingtung Univ. of Sci. and Technol., Taiwan*, <sup>3</sup>*Dept. of Nutr. and Health Sci., Fooyin Univ., Taiwan*, <sup>4</sup>*Food Biotechnol., Natl. Pingtung Univ. of Sci. and Technol., Taiwan*

**PC1326 Improvement of postprandial lipidemia by resveratrol through intestinal activation of peroxisome proliferator-activated receptor- $\alpha$**

Nobuyuki Takahashi<sup>1</sup>, Mayu Kikuchi<sup>1</sup>, Hiroyuki Tsuyama<sup>1</sup>, Manae Matsuda<sup>1</sup>, Miori Morikawa<sup>1</sup>, Miori Tanaka<sup>1</sup>, Hirofumi Inoue<sup>1</sup>, Rieko Nakata<sup>2</sup>, Hiroyasu Inoue<sup>2</sup>, Tsuyoshi Goto<sup>3</sup>, Teruo Kawada<sup>3</sup>, Kaeko Murota<sup>4</sup>, Mariko Uehara<sup>1</sup>

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**PC1327 Tomatidine reduces palmitate-induced lipid accumulation by activating AMPK via vitamin D receptor-mediated signaling in hepatocytes**

Hikari Kusu<sup>1</sup>, Hiroki Yoshida<sup>1</sup>, Michiko Kudo<sup>2</sup>, Mai Okuyama<sup>1</sup>, Naoki Harada<sup>1</sup>, Kentaro Tsuji-Naito<sup>2</sup>, Mitsugu Akagawa<sup>1</sup>

<sup>1</sup>Div. of Appl. Life Sci., Grad. Sch. of Life & Environ. Sci., Osaka Pref. Univ., Japan, <sup>2</sup>DHC Co., Lab., Div. 2, Japan

**PC1328 The effect of miso on non-alcoholic fatty liver and modulated gut microbiota in high fat diet fed rats**

Yen-Chen Tung<sup>1</sup>, Zhi-Rong Liang<sup>1</sup>, Chi-Tang Ho<sup>2</sup>, Kuan-Chen Cheng<sup>1</sup>, Ting-Jang Lu<sup>1</sup>, Min-Hsiung Pan<sup>1</sup>

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**PC1329 The regulation effects of *Ampelopsis grossedentata* derived dihydromyricetin on bile acids secretion and microbiota metabolites in metabolic syndrome**

Kun Xie<sup>1</sup>, Keyu Chen<sup>1</sup>, Xi He<sup>3</sup>, Kozue Sakao<sup>1,2</sup>, De-Xing Hou<sup>1,2</sup>

<sup>1</sup>United Grad. Sch. of Agric. Sci., Kagoshima Univ., Japan, <sup>2</sup>Dept. of Food Sci. & Biotech., Fac. of Agric., Kagoshima Univ., Japan, <sup>3</sup>Coll. of Animal Sci. and Technol., Hunan Agric. Univ., China

**PC1330 Effects of falcariindiol from Apiaceae vegetables on the gluconeogenesis in hepatoma cells**

Jun Yoshida<sup>1</sup>, Yui Kudo<sup>2</sup>, Yoshiaki Ito<sup>2</sup>, Ken-ichi Kimura<sup>2</sup>

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**PC1331 Protective effect of *Graptopetalum paraguayense* E. Walther against fructose-induced hepatic steatosis**

Siou-Ru Shen, She-Ching Wu

<sup>1</sup>Dept. of Foodsci., Grad. Sch. of Agric. Sci., Chiayi Univ., Taiwan

**PC1332 *N- $\gamma$ -(l-Glutamyl)-l-selenomethionine* decreases fat storage regulated by FAT-6, FAT-7, and TRXR-1 in *C. elegans***

Chun-Han Chang<sup>1</sup>, Harrison Xian-Qi Liao<sup>1</sup>, Fu-Lan Hsu<sup>2</sup>, Chi-Tang Ho<sup>3</sup>, Vivian Hsiu-Chuan Liao<sup>1</sup>

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**PC1333 Salmon cartilage proteoglycan improves cholesterol levels associated with postmenopausal syndrome in ovariectomized rats**

Hiroyuki Nozaka<sup>1</sup>, Erika Ozaki<sup>1</sup>, Toshiya Nakamura<sup>1</sup>, Ikuko Kakizaki<sup>1</sup>, Yoji Kato<sup>1</sup>, Masashi Goto<sup>2</sup>, Yutaka Suekawa<sup>2</sup>, Kazushi Yamamoto<sup>2</sup>

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**PC1334 The effect of the functional drink containing the combined *M. alba* and *L. esculentum* on lipid profiles and consumption safety in overweight volunteers**

Pavina Apiboon<sup>1</sup>, Jintanaporn Wattanathorn<sup>1,2</sup>, Supaporn Muchimapura<sup>1,2</sup>, Wipawee Thukham-mee<sup>1,2</sup>, Terdthai Tong-Un<sup>1,2</sup>

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**PC1335 Efficacy and safety evaluation of rose hip extract: double blind, randomized placebo-controlled clinical trials**

Akifumi Nagatomo, Ai Teraguchi, Takayuki Kodama, Hirosato Kawakami

Morishita Jintan Co., Ltd., Japan

**PC1336 *Salacia chinensis* stem extract and its thiosugar sulfonium constituent, neokotalanol, improves HbA1c levels in *ob/ob* mice**

Toshio Morikawa<sup>1,2</sup>, Masakazu Kobayashi<sup>3</sup>, Junji Akaki<sup>1,3</sup>, Yasuyo Yamaguchi<sup>3</sup>, Hiroo Yamasaki<sup>3</sup>, Kiyofumi Ninomiya<sup>1,2</sup>, Yutana Pongpiriyadacha<sup>4</sup>, Masayuki Yoshikawa<sup>1</sup>, Osamu Muraoka<sup>1,2</sup>

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**PC1337 The new combination of probiotics improves body weight regulation in obesity**

Shih-Chien Huang<sup>1</sup>, Yen-Ping Lei<sup>2</sup>, Pei-Wen Hsiao<sup>1</sup>, Ching-Pin Lin<sup>3,4</sup>

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**PC1338 Effects of sweet solution free-intake on blood glucose level and insulin concentration of mice**

Sachiko Sato, Yukiko Kondo, Eiichi Taira

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**C) Functions and Mechanisms: Molecular Targets of Food Factors**

**PC1401 Up-regulation of senescence marker protein 30 by epigallocatechin gallate attenuates t-BHP-induced oxidative stress**

Kohta Arakawa, Hirofumi Inoue, Miori Tanaka, Nobuyuki Takahashi, Mariko Uehara

Dept. of Nutr. Sci. and Food Safety, Grad. Sch. of Agric., Tokyo Univ. of Agric., Japan

- PC1402 Identification of the molecules involved in the anti-melanoma effect of Delphinidin**  
Motoki Murata<sup>1,2</sup>, Yuka Sato<sup>2</sup>, Yuki Marugame<sup>2</sup>, Hirofumi Tachibana<sup>2</sup>  
<sup>1</sup>ADRES, Ehime Univ., Japan, <sup>2</sup>Div. of Appl. Biol. Chem., Grad. Sch. of Bioresour. and Bioenviron. Sci., Kyushu Univ., Japan
- PC1403 Fisetin, but not robinetin, promotes glucose uptake in skeletal muscle: Involvement of pyruvate kinase PKM and ATP-dependent RNA helicase DDX1**  
Hitoshi Ashida, Megumi Aya, Yoko Yamashita  
 Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan
- PC1404 Identification of two G protein-coupled receptors as targets of curcumin**  
Yumi Arahori<sup>1</sup>, Mai Okuyama<sup>1</sup>, Naoki Harada<sup>1</sup>, Yoshiaki Teraoka<sup>1</sup>, Hiroko Horiuchi<sup>1</sup>, Norio Yamamoto<sup>2</sup>, Naoki Goshima<sup>3,4</sup>, Takashi Inui<sup>1</sup>, Hiroshi Inui<sup>5</sup>, Ryoichi Yamaji<sup>1</sup>  
<sup>1</sup>Div. Appl. Life Sci., Grad. Sch. Life Environ. Sci., Osaka Pref. Univ., Japan, <sup>2</sup>House Wellness Foods Co., Japan, <sup>3</sup>Mol. Prof. Res. Cent. Drug Discov., Natl. Inst. Adv. Ind. Sci. Technol., Japan, <sup>4</sup>Dept. Hum. Sci., Musashino Univ., Japan, <sup>5</sup>Dept. Nutr., Coll. Health Hum. Sci., Osaka Pref. Univ., Japan
- PC1405 Effect of pinocembrin on human umbilical vein endothelial cell apoptosis**  
 Ji-Hye Kim<sup>1,2</sup>, Mok-Ryeon Ahn<sup>1,2</sup>  
<sup>1</sup>Dept. of Food Sci. Nutr., Dong-A Univ., Korea, <sup>2</sup>Cent. for Sliver-Targeted Biomaterial, BB21 Plus Program, Grad. Sch., Dong-A Univ., Korea
- PC1406 Citrus peel polymethoxyflavones, sudachitin and nobiletin, induce distinct cellular responses in human keratinocyte HaCaT cells via the MAPK pathways**  
Shogo Abe<sup>1</sup>, Saki Hirose<sup>1</sup>, Mami Nishitani<sup>1</sup>, Akihiko Tsuji<sup>1,2</sup>, Keizo Yuasa<sup>1,2</sup>  
<sup>1</sup>Dept. of Biol. Sci. & Tech., Tokushima Univ. Grad. Sch., Japan, <sup>2</sup>Dept. of Biosci & Bioind., Tokushima Univ. Grad. Sch., Japan
- PC1407 Wasabi 6-methylthiohexyl isothiocyanate enhances Sirtuin 1 expression by modulating AMPK $\alpha$  and Nrf2 pathways**  
Xu-Chi Pan<sup>1</sup>, Keyu Chen<sup>2</sup>, Kun Xie<sup>2</sup>, Kozue Sakao<sup>1,2</sup>, De-Xing Hou<sup>1,2</sup>  
<sup>1</sup>Grad. Sch. of Agric., Kagoshima Univ., Japan, <sup>2</sup>United Grad. Sch. of Agric. Sci., Kagoshima Univ., Japan
- PC1408 Procyanidin C1 elicits melanoma cell growth inhibition by activating the protein phosphatase 2A pathway through 67-kDa laminin receptor signaling**  
Jaehoon Bae, Motofumi Kumazoe, Yoshinori Fujimura, Hirofumi Tachibana  
 Div. of Appl. Biol. Chem., Dept. of Biosci. and Biotechnol., Fac. of Agric., Kyushu Univ., Japan

**PC1409 Genistein increases NAD biosynthesis through the induction of NAMPT expression in adipocytes**

Takakazu Mitani<sup>1</sup>, Shun Watanabe<sup>1</sup>, Shigeru Katayama<sup>2</sup>, Soichiro Nakamura<sup>1</sup>

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**PC1410 RNA-Seq identifies novel mechanistic targets of withaferin A in prostate cancer cells**

Eun-Ryeong Hahm, Su-Hyeong Kim, Krishna B. Singh, Shivendra V. Singh

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**PC1411 Cyanidin-3-glucoside attenuates 4-hydroxynonenal-and visible light-induced retinal damage *in vitro* and *in vivo***

Yong Wang, Hui Sun, Wentao Qi

Academy of Natl. Food and Strategic Reserves Administration, China

**C) Functions and Mechanisms: Nutritional Regulation of Epigenetics****PC1501 Beta-carotene exerts anti-colon cancer stem cells effects by regulating DNA methylation and histone modification**

Daeun Kim, Yerin Kim, Yuri Kim

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**PC1502 Maternal dietary inulin after pregnancy affected the development of T1D in the offspring**

Yukiko Kagohashi<sup>1</sup>, Reiko Ikeda<sup>2</sup>

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**PC1503 Two days of prenatal methionine deficiency during the development of endocrine precursor cells impairs later-life glucose tolerance in mice**

Huijuan Jia<sup>1</sup>, Nobuaki Shiraki<sup>2</sup>, Shoen Kume<sup>2</sup>, Hisanori Kato<sup>1</sup>

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**C) Functions and Mechanisms: Protein Modification by Food Factors****PC1601 Pyridoxamine inhibits lipofuscin formation and exerts cytoprotective action against retinal-exposed retinal pigment epithelial cells**

Chika Yamashita<sup>1</sup>, Ryoko Ide<sup>1</sup>, Kenji Kai<sup>1</sup>, Kyozo Suyama<sup>2</sup>, Mitsugu Akagawa<sup>1</sup>

<sup>1</sup>Div. of Appl. Life Sci., Grad. Sch. of Life & Environ. Sci., Osaka Pref. Univ., Japan, <sup>2</sup>Grad. Sch. of Med., Tohoku Univ., Japan

**PC1602 Breeding grapefruit for low cytochrome P4503A4 inhibition**

Yelena Guttman<sup>1</sup>, Iris Yedidia<sup>2</sup>, Adi Nudel<sup>1</sup>, Yuliya Zhmykhova<sup>1</sup>, Nir Carmi<sup>2</sup>, Zohar Kerem<sup>1</sup>

<sup>1</sup>Inst. of Biochem., Food Sci. and Nutr., The Robert H. Smith Fac. of Agric., Food and Environ., The Hebrew Univ. of Jerusalem, Israel, <sup>2</sup>Inst. of Plant Sci., Agric. Res. Organization, Volcani Cent., Israel

**PC1603 Detection of new advanced glycation end product in collagen-glyceraldehyde system and in mice injected with glyceraldehyde**Agustin Martin-Morales, Kenji Sato*Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan***PC1604 A new method for the purification of polyphenol-binding proteins by pull-down assay with polyvinylpyrrolidone**Xinwei Tan<sup>1</sup>, Kazuki Maesako<sup>2</sup>, Mitsugu Akagawa<sup>3</sup>, Hitoshi Ashida<sup>4</sup>, Takeshi Ishii<sup>1,2,5</sup><sup>1</sup>*Grad. Sch. of Food and Med. Sci., Kobe Gakuin Univ., Japan*, <sup>2</sup>*Grad. Sch. of Nutr., Kobe Gakuin Univ., Japan*, <sup>3</sup>*Div. of Appl. Life Sci., Grad. Sch. of Life & Environ. Sci., Osaka Pref. Univ., Japan*, <sup>4</sup>*Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan*, <sup>5</sup>*Dept. of Nutr., Kobe Gakuin Univ., Japan***C) Functions and Mechanisms: Redox Regulation****PC1701 Supplementation of Morin attenuates oxidative stress and muscle wasting in mouse C2C12 skeletal myotubes treated with dexamethasone**Anayt Ulla, Takayuki Uchida, Yukari Miki, Kosuke Sugiura, Ayako Ohno, Reiko Nakao, Takeshi Nikawa*Dept. of Nutr. Physiol., Inst. of Med. Nutr., Tokushima Univ. Grad. Sch., Japan***PC1702 Mechanisms of oxidative stress induced by vitamin B<sub>12</sub> deficiency in the nematode *Caenorhabditis elegans***Tomohiro Bito<sup>1</sup>, Naho Okamoto<sup>2</sup>, Yukinori Yabuta<sup>1</sup>, Fumio Watanabe<sup>1</sup><sup>1</sup>*Fac. of Agric., Tottori Univ., Japan*, <sup>2</sup>*The United Grad. Sch. of Agric., Tottori Univ., Japan***PC1703 Retinol as well as  $\beta$ -carotene can enhance glutathione level in cultured murine RAW264 macrophages independent of retinoic acid signaling pathway**Rintaro Yamanishi<sup>1</sup>, Yuuka Mukai<sup>2</sup><sup>1</sup>*Dept. of Food Sci. & Nutr., Sch. of Nutr. & Diet., Kanagawa Univ. of Hum. Serv., Japan*, <sup>2</sup>*Dept. of Food Hyg. & Funct., Sch. of Nutr. & Diet., Kanagawa Univ. of Hum. Serv., Japan***PC1704 Hypoglycemic effect and its possible mechanism of oral administered superoxide dismutase**Shutao Liu, Hangqi Liu, Dan Zhao, Chaoyi Pan, Xuepu Jin, Yujia Hu, Xiaolu Gao, Pingfan Rao*Inst. of Biotechnol., Fuzhou Univ., China***PC1705 Effect of *Spirulina* lipids on oxidative stress in diet-induced obese mice**Yu-Hong Yang<sup>1</sup>, Lei Du<sup>2</sup>, Masashi Hosokawa<sup>3</sup>, Kazuo Miyashita<sup>3</sup><sup>1</sup>*Coll. of Food Sci. and Eng., Qilu Univ. of Technol., China*, <sup>2</sup>*Sch. of Public Health, Shandong Univ., China*, <sup>3</sup>*Fac. of Fish. Sci., Hokkaido Univ., Japan*

## C) Functions and Mechanisms: Skin Health

### PC1801 Intestinal absorption of ceramide prepared from soy sauce lees and its dietary effect on skin barrier function

Kazushi Ohta<sup>1</sup>, Shinobu Hiraki<sup>2</sup>, Masakatsu Miyanabe<sup>2</sup>, Tatsuro Ueki<sup>3</sup>, Yuki Manabe<sup>1</sup>, Tatsuya Sugawara<sup>1</sup>

<sup>1</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>GENUINE R&D Co., Ltd., Japan,

<sup>3</sup>Fukuoka Soy sauce Brewing Co., Japan

### PC1802 Preventive effect of macelignan on particulate matter-induced skin damage by inhibiting aryl hydrocarbon receptor signaling

Jihye Park, Haneul Kang, Jae-Kwan Hwang

Dept. of Biotechnol., Yonsei Univ., Korea

### PC1803 Squalene oxidation and its effect on human keratinocyte cell line HaCaT

Saoussane Khalifa, Naoki Shimizu, Junya Ito, Takahiro Eitsuka, Kiyotaka Nakagawa

Dept. of Biosci. Biotech. for Futr. Bioind., Grad. Sch. of Agric. Sci., Tohoku Univ., Japan

### PC1804 Dietary ceramide 2-aminoethylphosphonate, a marine sphingolipid, is intestinally absorbed and improves dry skin in hairless mice

Nami Tomonaga<sup>1</sup>, Yuki Manabe<sup>1</sup>, Kazuhiko Aida<sup>2</sup>, Tatsuya Sugawara<sup>1</sup>

<sup>1</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan, <sup>2</sup>Innovation Cent., Nippon Flour Mills Co., Ltd., Japan

### PC1805 Intake of collagen peptide improves facial skin properties –Randomized placebo-controlled double-blind trial–

Kumiko Kuwaba<sup>1</sup>, Yoh-ichi Koyama<sup>1,3</sup>, Yukihiro Tsukada<sup>2</sup>, Masashi Kusubata<sup>1</sup>, Kazunori Mizuno<sup>1</sup>

<sup>1</sup>Res. Inst. of Biomatrix, Nippi Inc., Japan, <sup>2</sup>Gelatin Div., Nippi Inc., Japan, <sup>3</sup>Inst. for Animal Reproduction, Japan

### PC1806 Effects of enzymatically synthesized glycogen on PM2.5-induced inflammation in NHEK cells

Tomoya Kitakaze<sup>1</sup>, Takashi Furuyashiki<sup>2</sup>, Hitoshi Ashida<sup>1</sup>

<sup>1</sup>Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan, <sup>2</sup>Ezaki Glico Co., Ltd., Japan

### PC1807 Effect of Chimp extract on aquaporin in the skin

Nobutomo Ikarashi<sup>1</sup>, Chenchen Pei<sup>1</sup>, Miho Kaneko<sup>1</sup>, Ai Kawasaki<sup>1</sup>, Riho Tanaka<sup>1</sup>, Naoya Takayama<sup>1</sup>, Daigo Wakana<sup>2</sup>, Tomoo Hosoe<sup>2</sup>, Risako Kon<sup>1</sup>, Hiroyasu Sakai<sup>1</sup>, Junzo Kamei<sup>1</sup>

<sup>1</sup>Dept. of Biomol. Pharm., Hoshi Univ., Japan, <sup>2</sup>Lab. of Bioregulatory Sci., Hoshi Univ., Japan

### PC1808 The p75NTR-positive fibroblasts from mouse skin respond to Pro-Hyp, collagen-derived peptide

Tomoko Asai<sup>1</sup>, Kazunobu Yoshikawa<sup>2</sup>, Kazuhiro Sawada<sup>2</sup>, Xin Wei<sup>2</sup>, Kenji Sato<sup>2</sup>

<sup>1</sup>Dept. of Food Sci. and Nutr., Fac. of Human Life and Environ. Sci., Nara Women's Univ., Japan, <sup>2</sup>Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan

**PC1809 Long-term intake of kale cultivar with high content of glucoraphanin prevents skin aging via activating Nrf2 and TβRII/Smad pathway in SAMP1 mice**

Saki Ichikawa<sup>1</sup>, Yuki Uchibori<sup>1</sup>, Supattra Chawalitpong<sup>1</sup>, Patipark Kueanjinda<sup>2</sup>, Takakazu Mitani<sup>1</sup>, Soichiro Nakamura<sup>1</sup>, Shigeru Katayama<sup>1,2</sup>

<sup>1</sup>Dept. of Agric., Grad. Sch. of Sci. Tech., Shinshu Univ., Japan, <sup>2</sup>Div. of Biomol. Innov., Biomed. Inst., Shinshu Univ., Japan

**C) Functions and Mechanisms: Others**

**PC1901 Inhibition of AGEs formation by Lotus Seedpod Oligomeric Procyanidins through RAGE-MAPK signaling and NF-κB activation in high-fat-diet rats**

Qian Wu

Sch. of Food and Biol. Eng., Hubei Univ. of Technol., China

**PC1902 Aged garlic extract induces aldehyde dehydrogenase via Nrf2/ARE pathway**

Masako Inoue, Sihao Yuan, Tomoya Kitakaze, Hitoshi Ashida

Dept. of Agrobiosci., Grad. Sch. of Agric. Sci., Kobe Univ., Japan

**PC1903 Clinical evaluation of the beneficial effects of broccoli sprout extracts on sleep quality in healthy volunteers**

Masahiro Kikuchi<sup>1,2</sup>, Yudai Aoki<sup>3</sup>, Noriaki Kishimoto<sup>2,4</sup>, Nana Urata<sup>4,5</sup>, Shinji Takashimizu<sup>4,5</sup>, Kazutaka Yoshida<sup>3</sup>, Koichi Aizawa<sup>3</sup>, Hiroyuki Suganuma<sup>3</sup>, Yasuhiro Nishizaki<sup>2,4</sup>

<sup>1</sup>Dept. of Gastroenterol., Natl. Hosp. Organization Tokyo Med. Cent., Japan, <sup>2</sup>Tokai Univ. Tokyo Hosp., Japan, <sup>3</sup>Innovation Div., Kagome Co., Ltd., Japan, <sup>4</sup>Dept. of Clin. Health Sci., Sch. of Med., Tokai Univ., Japan, <sup>5</sup>Health Screening Cent., Tokai Univ. Hosp., Japan

**PC1904 Analysis of lacrimal gland ageing in Klotho mutant mice**

Ya-Jing Liu<sup>1</sup>, Yu-Jin Tang<sup>1</sup>, Tsung-Han Lu<sup>1</sup>, Chia-Yun Hsu<sup>1</sup>, Meng-Tian Hsieh<sup>1</sup>, Han-Hsin Chang<sup>2</sup>, David Pei-Cheng Lin<sup>1</sup>

<sup>1</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan

**PC1905 The inhibitory effects of quercetin on the intestinal cesium absorption in a Caco-2 cell system**

Michiko T. Yasuda<sup>1,2</sup>, Saki Kondo<sup>1</sup>, Yuki Hayashi<sup>1</sup>, Chika Tokuyama<sup>2</sup>, Shinichi Ikushiro<sup>3</sup>, Shin-Ichiro Karaki<sup>2</sup>, Kayoko Shimoi<sup>2</sup>

<sup>1</sup>Sch. of Life studies, Sugiyama Jogakuen Univ., Japan, <sup>2</sup>Inst. for Environ. Sci., Univ. of Shizuoka, Japan, <sup>3</sup>Fac. of Eng., Toyama Pref. Univ., Japan



- PC1906 Effects of broccoli sprout extract supplement on liver functions in healthy subjects**  
Masahiro Kikuchi<sup>1,2</sup>, Yudai Aoki<sup>3</sup>, Koichi Aizawa<sup>3</sup>, Hiroyuki Suganuma<sup>3</sup>, Yasuhiro Nishizaki<sup>2,4</sup>  
<sup>1</sup>Dept. of Gastroenterol., Natl. Hosp. Organization Tokyo Med. Cent., Japan, <sup>2</sup>Tokai Univ. Tokyo Hosp., Japan, <sup>3</sup>Innovation Div., Kagome Co., Ltd., Japan, <sup>4</sup>Dept. of Clin. Health Sci., Sch. of Med., Tokai Univ., Japan
- PC1907 Evaluation of Klotho mutant mice as a study model for age-related macular degeneration**  
Chia-Wen Huang<sup>1</sup>, Yu-Jin Tang<sup>1</sup>, Han-Hsin Chang<sup>2</sup>, David Pei-Cheng Lin<sup>1</sup>  
<sup>1</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan
- PC1908 Diet with an inulin prolongs the honeymoon period of NOD mice**  
Yukiko Kagohashi<sup>1</sup>, Reiko Ikeda<sup>2</sup>, Hiroki Otani<sup>2</sup>  
<sup>1</sup>Dept. of Health and Disease, The Univ. of Shimane, Japan, <sup>2</sup>Fac. of Med., Shimane Univ., Japan
- PC1910 Study of protein digestibility of commercial fish skin collagen and its antioxidative function during simulated gastro-intestinal digestion**  
Sunantha Ketnawa, Qin Wei, Yukiharu Ogawa  
Grad. Sch. of Horti. Sci., Chiba Univ., Japan
- PC1911 A randomized controlled trial of *Cordyceps cicadae* mycelium in dry eye syndrome**  
Bo-Yi Jhou<sup>1</sup>, Jui-Hsia Hsu<sup>1</sup>, Chin-Chu Chen<sup>1,2,3,4,5</sup>  
<sup>1</sup>Grape King Bio, Taiwan, <sup>2</sup>Dept. of Food Sci., Nutr., and Nutraceutical Biotechnology, Shih Chien Univ., Taiwan, <sup>3</sup>Inst. of Food Sci. and Technol., Natl. Taiwan Univ., Taiwan, <sup>4</sup>Dept. of Bioscience Technol., Chung Yuan Christian Univ., Taiwan, <sup>5</sup>Inst. of Biotechnology, Natl. Changhua Univ. of Education, Taiwan
- PC1912 Isolation of colloidal particles from porcine bone soup and their protective effects on the epithelial cells of intestine (Caco-2 cell)**  
Huiqin Wang, Guanzhen Gao, Jianwu Zhou, Lijing Ke, Yongyang Jin, Pingfan Rao  
Food Nutr. Sci. Centre, Sch. of Food Sci. and Biotechnol., Zhejiang Gongshang Univ., China
- PC1913 An alcohol-derived metabolite salsolinol induces hepatic damage in male mice**  
Hyunjung Choi<sup>1</sup>, Xiancai Zhong<sup>2</sup>, Jeong-Eun Lee<sup>1</sup>, Jae Min Lim<sup>3</sup>, Kwang Pyo Kim<sup>3</sup>, Young-Joon Surh<sup>2</sup>, Hye-Kyung Na<sup>1</sup>  
<sup>1</sup>Dep. of Food Sci. & Biotech., Coll. of Knowledge-Based Services Eng., Sungshin Women's Univ., Korea, <sup>2</sup>Tumor Microenviron. Global Core Res. Ctr., Coll. of Pharm., Seoul Natl. Univ., Korea, <sup>3</sup>Dep. of Appl. Chem., Coll. of Appl. Sci., Kyung Hee Univ., Korea

**PC1914 An alcohol-derived metabolite salsolinol induces the Nrf2-mediated expression of heme oxygenase-1 in the SK-Hep1 liver cancer cells**

Jeong-Eun Lee<sup>1</sup>, Hong-Kyung Yang<sup>2</sup>, Muhammad Usman Jamil<sup>1,3</sup>, Hyunjung Choi<sup>1</sup>, Young-Joon Surh<sup>3</sup>, Hye-Kyung Na<sup>1</sup>

<sup>1</sup>Dep. of Food Sci. & Biotech., Coll. of Knowledge-Based Services Eng., Sungshin Women's Univ., Korea, <sup>2</sup>Dep. of Future Appl. Sci., Coll. of Nat. Sci., Sungshin Women's Univ., Korea, <sup>3</sup>Tumor Microenviron. Global Core Res. Ctr., Coll. of Pharm., Seoul Natl. Univ., Korea

**D) Others: Analytical Methods and Omics Technologies****PD0101 Digestive stability of polyphenols in enzyme-modified common buckwheat sprouts extract using simultaneous analysis by HPLC**

Davin Jang<sup>1</sup>, Mi-Seon Kim<sup>1</sup>, Chan-Su Rha<sup>1</sup>, Jun-Gu Kwak<sup>2</sup>, Jong Hoon Kim<sup>3</sup>, Chang-Won Ahn<sup>3</sup>, Nam Soo Han<sup>2</sup>, Dae-Ok Kim<sup>1</sup>

<sup>1</sup>Dept. of Food Sci. and Biotechnol., Kyung Hee Univ., Korea, <sup>2</sup>BK 21 for Bio-Resour. Dev., Div. of Anim., Hortic. and Food Sci., Chungbuk Nat. Univ., Korea, <sup>3</sup>Res. & Dev. Cent., Nongshim Co., Ltd., Korea

**PD0102 An improved internal standard mixture for comprehensive tracking of orally administered collagen hydrolysate using LC-MS**

Yuki Taga<sup>1</sup>, Yu Iwasaki<sup>2</sup>, Yasutaka Shigemura<sup>2</sup>, Kazunori Mizuno<sup>1</sup>

<sup>1</sup>Nippi Res. Inst. of Biomatrix, Japan, <sup>2</sup>Dept. of Nutr., Fac. Domest. Sci., Tokyo Kasei Univ., Japan

**PD0103 Widely targeted metabolomics of curry using LC/MS/MS –How compounds change when curry is stored overnight? –**

Takanari Hattori<sup>1</sup>, Harumi Kubo<sup>1</sup>, Yasuko Yamada<sup>2</sup>, Mami Okamoto<sup>1</sup>, Jun Watanabe<sup>1</sup>

<sup>1</sup>Shimadzu Co., Japan, <sup>2</sup>Shimadzu Techno-Research Inc., Japan

**PD0104 Validation of a quantification method using gas chromatography-mass spectrometry –Intra-laboratory validation for specifications of food additive–**

Atsuko Tada, Fuyuko Hioki, Noriko Furusho, Naoko Masumoto, Chie Tatebe, Hiroki Kubota, Kyoko Sato

Div. of Food Add., Natl. Inst. of Health Sci., Japan

**PD0105 Rapid separation and analysis of self-assembled nanoparticles from black tea by capillary zone electrophoresis**

Jianqiao Zou, Lijing Ke, Jianwu Zhou, Guanzhen Gao, Huiqin Wang, Zhaoshuo Yu, Zhangwen Peng, Sihao Luo, Pingfan Rao

SIBS-Zhejiang Gongshang Univ. Joint Cent. for Food and Nutr. Sci., Zhejiang Gongshang Univ., China

**PD0106 Photodynamic therapy induces differential changes in human breast epithelial cells lipidome**

Alex Inague, Ancély Ferreira dos Santos, Marcos Yukio Yoshinaga, Leticia Labriola, Sayuri Miyamoto

Dept. of Biochem., Chem. Inst., Univ. of São Paulo, Brazil

- PD0107 Improved fermentation process monitoring using dual injection UHPLC system**  
Keiko Matsumoto, Katsuaki Koterawasa, Hidetoshi Terada, Kyoko Watanabe  
*Analytical & Measuring Dept., Shimadzu Co., Japan*
- PD0108 Determination of catechin and epicatechin in dark chocolate by synchronous front-face fluorescence spectroscopy**  
Jin Tan<sup>1</sup>, Rong Li<sup>1</sup>, Shu-Hua Tang<sup>1</sup>, Ying Wang<sup>1</sup>, Zi-Tao Jiang<sup>1,2</sup>  
<sup>1</sup>*Coll. of Biotechnol. and Food Sci., Tianjin Univ. of Comm., China,* <sup>2</sup>*Sch. of Food Eng., Tianjin Tianshi Coll., China*
- PD0109 Quantification of wheat proteins from curry paste by using phase transfer surfactants-aided proteomics approach**  
Takeshi Masuda<sup>1,2</sup>, Ushio Takeda<sup>3</sup>, Sumio Ohtsuki<sup>1,2</sup>  
<sup>1</sup>*Fac. of Life Sci., Kumamoto Univ., Japan,* <sup>2</sup>*AMED-CREST, Japan,* <sup>3</sup>*SCIEX, Japan*
- PD0110 Method development for the determination of 3-chloropropane-1,2-diol fatty acid esters and glycidyl fatty acid esters in edible oils**  
Hsin-Ya Tsai, Jhih-Ning Hsu, Nan-Wei Su  
*Dept. of Agric. Chem., Natl. Taiwan Univ., Taiwan*
- PD0112 Detection of cysteine peptides *in vitro* and *in vivo* digests of bovine lactoferrin**  
Koji Kanazawa<sup>1</sup>, Akika Ejima<sup>2</sup>, Megumi Nakamura<sup>1</sup>, Yasushi A. Suzuki<sup>1</sup>, Kenji Sato<sup>2</sup>  
<sup>1</sup>*Biochem. Lab., Saraya Co. Ltd., Japan,* <sup>2</sup>*Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan*
- PD0113 Analytical characterization of silver nanowire-anchored biological interface for sucrose detection**  
Dipali Bagal-Kestwal, Been Huang Chiang  
*Inst. of Food Sci. and Tech., Natl. Taiwan Univ., Taiwan*
- PD0114 Physico-chemical characterization of super-wetted multi-layered nanocomposite matrix with entrapped phenoloxidases**  
Dipali Bagal-Kestwal, Been Huang Chiang  
*Inst. of Food Sci. and Tech., Natl. Taiwan Univ., Taiwan*

**D) Others: Animal Cell Technology****PD0201 Construction of *in vitro* NAFLD model system using coculture and analysis of food components to prevent NAFLD**

Yuka Hazu<sup>1</sup>, Yui Motomatsu<sup>2</sup>, Atsuyoshi Nishina<sup>3</sup>, Hideo Satsu<sup>2</sup>

<sup>1</sup>Dept. of Biotech., Grad. Sch. of Eng., Maebashi Inst. Technol., Japan, <sup>2</sup>Dept. of Biotech., Maebashi Inst. Technol., Japan, <sup>3</sup>Coll. of Sci. and Technol. Nihon Univ., Japan

**PD0202 Development of a NFκB-responsive cell system and anti-inflammatory effect of 1-deoxynojirimycin in mulberry leaves**

Hideo Satsu<sup>1</sup>, Mizuki Honda<sup>2</sup>, Asuka Kamei<sup>3</sup>, Mio Aida<sup>1</sup>

<sup>1</sup>Dept. of Biotech., Maebashi Inst. Technol., Japan, <sup>2</sup>Dept. of Biotech., Grad. Sch. of Eng., Maebashi Inst. Technol., Japan, <sup>3</sup>KISTEC, Japan

**PD0203 Elucidation of recognition mechanism of dorsal root ganglion for food factors**

Yota Fukuda<sup>1,2</sup>, Naomi Osakabe<sup>2</sup>, Takahiro Adachi<sup>1</sup>

<sup>1</sup>Dept. of Immunol., Med. Res. Inst., Tokyo Med. and Dental Univ., Japan, <sup>2</sup>Dept. of Bio-Sci. and Eng., Shibaura Inst. of Technol., Japan

**D) Others: Biomarkers****PD0301 Analysis of fecal gaseous metabolites in NASH-hepatocellular carcinoma model mice**

Mai Kato<sup>1</sup>, Tsutomu Hashidume<sup>1</sup>, Yutaka Shoji<sup>1</sup>, Kumiko Shoji<sup>2</sup>, Miki Igarashi<sup>3</sup>, Sumio Hayakawa<sup>4</sup>, Yuko Yoshikawa<sup>1,5</sup>, Noriyuki Miyoshi<sup>1</sup>

<sup>1</sup>Grad. Sch. of Integrated Pharm. and Nutr. Sci., Univ. of Shizuoka, Japan, <sup>2</sup>Kagawa Education Inst. of Nutr., Japan, <sup>3</sup>Tokyo Univ. of Agric. and Technol., Japan, <sup>4</sup>Nippon Med. Sch., Japan, <sup>5</sup>Nippon Vet. and Life Sci. Univ., Japan

**PD0302 Plasma lipoprotein profiles and free choline levels in NASH model rats –novel minimally invasive indicators for NASH–**

Koji Kuriyama<sup>1</sup>, Junichiro Takahashi<sup>1</sup>, Takanobu Kiuchi<sup>1</sup>, Kazuyuki Hiwatashi<sup>2</sup>, Akira Sasaki<sup>2</sup>, Keishi Hata<sup>2</sup>

<sup>1</sup>Skylight Biotech. Inc., Japan, <sup>2</sup>Akita Res. Inst. of Food & Brewing, Japan

**PD0303 Identification of new aging biomarkers correlated with telomere and inflammatory marker**

Hikari Osawa, Tsuyoshi Tsuduki

Grad. Sch. of Agric., Sci., Tohoku Univ., Japan

**PD0304 Either calf or mid-arm circumference could be a simple marker for screening of pre-sarcopenia in the middle-aged elderly**

Po-Sheng Chang<sup>1</sup>, Chi-Hua Yen<sup>2,3,4</sup>, Ching-Ju Chiu<sup>1</sup>, Yu-Yun Huang<sup>1</sup>, Ping-Ting Lin<sup>1</sup>

<sup>1</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Sch. of Med., Chung Shan Med. Univ., Taiwan, <sup>3</sup>Dept. of Family and Community Med., Chung Shan Med. Univ. Hosp., Taiwan, <sup>4</sup>Cent. for Education and Res. on Geriatrics and Gerontology, Chung Shan Med. Univ., Taiwan

**D) Others: Epidemiology****PD0401 Evaluation of daily consumption pattern as functional food sources for anticipating diabetes mellitus for Indonesian millennial generation**

Indah Epriliati<sup>1,2</sup>, Elisabeth Supriharyanti<sup>3</sup>, Ceacilia E Susilawati<sup>3</sup>

<sup>1</sup>Dept. of Food Technol., Fac. of Agric. Technol., Widya Mandala Surabaya Catholic Univ., Indonesia,

<sup>2</sup>Food and Nutr. Res. Cent., Widya Mandala Surabaya Catholic Univ., Indonesia, <sup>3</sup>Dept. of Management, Fac. of Business, Widya Mandala Surabaya Catholic Univ., Indonesia

**PD0402 Association between coffee consumption and liver enzyme levels in the Korea Nurses' Health Study**

Sihan Song<sup>1</sup>, Yanghee Pang<sup>2</sup>, Heeja Jung<sup>3</sup>, Hea-Young Lee<sup>4</sup>, Sue Kim<sup>5</sup>, Oksoo Kim<sup>2</sup>, Jung Eun Lee<sup>1</sup>

<sup>1</sup>Dept. of Food and Nutr., Coll. of Human Ecology, Seoul Natl. Univ., Korea, <sup>2</sup>Coll. of Nursing, Ewha

Womans Univ., Korea, <sup>3</sup>Coll. of Nursing, Konyang Univ., Korea, <sup>4</sup>Dept. of Nursing, Doowon Tech. Univ., Korea, <sup>5</sup>Coll. of Nursing, Yonsei Univ., Korea

**PD0403 Temporal variability of caffeine and caffeine metabolite concentrations in spot urine samples in 50 North Carolina adults over a six-week period**

Michael Rybak<sup>1</sup>, Ching-I Pao<sup>1</sup>, Maya Sternberg<sup>1</sup>, Patrick Simon<sup>1</sup>, Jon Sobus<sup>2</sup>, Marsha Morgan<sup>2</sup>

<sup>1</sup>US Cent. for Dis. Control and Prevention, USA, <sup>2</sup>US Environ. Protection Agency, Res. Triangle Park, USA

**PD0404 Maternal nutritional status during pregnancy and nursing period – A comparison by meal skipping –**

Yukiko Kagohashi<sup>1</sup>, Yoko Nakatani<sup>1</sup>, Reiko Nagashima<sup>1</sup>, Aiko Katsube<sup>2</sup>, Hiroki Otani<sup>3</sup>

<sup>1</sup>The Univ. of Shimane, Japan, <sup>2</sup>Shimane Pref. Cent. Hosp., Japan, <sup>3</sup>Fac. of Med. Shimane Univ., Japan

**D) Others: Food Hygienics****PD0501 Preparation of water-soluble antibacterial silver nanoparticle for food applications**

Yusuke Horiki<sup>1</sup>, Kazumitsu Naoe<sup>1</sup>, Jun Sawai<sup>2</sup>, Masanao Imai<sup>3</sup>

<sup>1</sup>Dept. of Matl. Sci. & Chem. Eng., Fac. of Adv. Eng., Natl. Inst. of Technol., Nara Coll., Japan, <sup>2</sup>Dept. of Nutr. & Life Sci., Fac. of Appl. Biosci., Kanagawa Inst. of Technol., Japan, <sup>3</sup>Grad. Sch. of Bioresour. Sci., Nihon Univ., Japan

**PD0502 Consecutive fried oil intake impairs tear quality and quantity and the adverse effects can be ameliorated by *Vitis sinocinerea* extracts**

Chia-Yun Hsu<sup>1</sup>, Pang-Yuang Huang<sup>1</sup>, Tsung-Han Lu<sup>1</sup>, Meng-Tian Hsieh<sup>1</sup>, Ya-Jing Liu<sup>1</sup>, Han-Hsin Chang<sup>2</sup>, David Pei-Cheng Lin<sup>1</sup>

<sup>1</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan

**D) Others: Food Processing****PD0601 Synthesis of thermoresponsive gelatin-alginate hybrid capsules for food flavor encapsulation and controlled release**

Kyungsene Lee, Young Min Kim, Keonwook Nam, Young Hoon Roh

*Dept. of Biotechnol., Coll. of Life Sci. and Biotechnol., Yonsei Univ., Korea*

**PD0602 Size-controlled multi-layered DNA/PLL/HA nanoparticles for efficient intestinal absorption of functional food ingredient**

Taehyung Kim, Keonwook Nam, Eunji Kwak, Young Hoon Roh

*Dept. of Biotechnol., Coll. of Life Sci. and Biotechnol., Yonsei Univ., Korea*

**PD0603 Development of chitosan layered nanostructured lipid carrier for efficient delivery of Curcumin**

Young Min Kim, Kyungjik Yang, Kyeong Soo Kim, Jiyong Park, Young Hoon Roh

*Dept. of Biotechnol., Coll. of Life Sci. and Biotechnol., Yonsei Univ., Korea*

**PD0604 Immobilizing laccase on electrospun chitosan fiber for biosensing applications on fresh-cut vegetables and fruits**

Jhao-Rong Jhuang<sup>1</sup>, Shyi-Neng Lou<sup>2</sup>, Shih-Bin Lin<sup>2</sup>, Shih- Hsin Chen<sup>2</sup>, Li-Chen Chen<sup>2</sup>, Hui-Huang Chen<sup>2</sup>

*<sup>1</sup>Micro-Tech Foods Ingredients, Inc., Taiwan, <sup>2</sup>Dept. of Food Sci., Coll. of Bioresour., Natl. Ilan Univ., Taiwan*

**PD0605 Quality and antioxidant properties of cookie prepared with apple pomace powder**

Keum-Il Jang, Young-Kyoung Kim, Seung-Hyeon Cha, Ui-Hwan Jung

*Dept. of Food Sci. Biotechnol., Coll. of Agric. Life Environ. Sci., Chungbuk Natl. Univ., Korea*

**PD0607 Penetration efficiency of red ginseng extract into egg by removal of cuticle layer on egg**

Seung-Hyeon Cha, Ui-Hwan Jung, Keum-Il Jang

*Dept. of Food Sci. Biotechnol. , Coll. of Agric. Life Environ. Sci., Chungbuk Natl. Univ., Korea*

**PD0608 Quality characteristics of soymilk prepared with hulled soybean**

Ui-Hwan Jung, Jin-Sol Kim, Seung-Hyeon Cha, Keum-Il Jang

*Dept. of Food Sci. Biotechnol. , Coll. of Agric. Life Environ. Sci., Chungbuk Natl. Univ., Korea*

**PD0609 Addition of pigeon pea for improve physicochemical properties, cooking quality and analog rice acceptability based on mocaf and seaweed**

Satrijo Saloko<sup>1</sup>, Sisca Diani Rosalina<sup>2</sup>, Yudi Pranoto<sup>2</sup>, Supriyadi<sup>2</sup>, Sri Widyastuti<sup>1</sup>, Muktasam<sup>1</sup>, Rumiya<sup>2</sup>, Agung Endro Nugroho<sup>2</sup>, Yekti Asih Purwestri<sup>2</sup>, Janet Reid<sup>3</sup>

*<sup>1</sup>Mataram Univ., Indonesia, <sup>2</sup>Universitas Gadjah Mada, Indonesia, <sup>3</sup>Massey Univ., Indonesia*

- PD0610 Impact of lemongrass (*Cymbopogon citratus*) extract preservation method to the alpha-glucosidase inhibitory activity and chemical contents**  
 Maria DPT Gunawan-Puteri<sup>1</sup>, Adrian Susanto<sup>1</sup>, Nina Artanti<sup>2</sup>  
<sup>1</sup>Dept. of Food Technol., Swiss German Univ., Indonesia, <sup>2</sup>Res. Cent. for Chem., Indonesian Inst. of Sci. (LIPI), Indonesia
- PD0611 Producing the stabilized whole high amylose maize flour with high functionality**  
Hsi-Mei Lai, Chih-Hsuan Chan  
 Dept. of Agric. Chem., Natl. Taiwan Univ., Taiwan
- PD0612 The thermo stability of caprine milk fat globule membrane proteins**  
 Ying Ma, Lina Zhang, Xiaoming Liu, Peng Zhou  
 State Key Lab. of Food Sci. and Technol., Jiangnan Univ., China
- PD0613 Changes in antigenicity of food allergens through heating and irradiation**  
Ikuko Minami<sup>1,2</sup>, Mayuri Inoue<sup>3</sup>, Sakura Iwashita<sup>3</sup>, Etsuo Okuno<sup>3</sup>, Koichiro Ohnuki<sup>4</sup>, Kuniyoshi Shimizu<sup>5</sup>  
<sup>1</sup>Fac. of Nutr., Kobe Gakuin Univ., Japan, <sup>2</sup>Intl. Coll. of Arts and Sciences, Fukuoka Women's Univ., Japan, <sup>3</sup>Fac. of Food and Nutr., Kyushu Nutr. Welfare Univ., Japan, <sup>4</sup>Dept. of Biol. and Environ. Chem., Kindai Univ., Japan, <sup>5</sup>Dept. of Agro-environ. Sci., Fac. of Agric., Kyushu Univ., Japan
- PD0614 Analysis in active milk serum proteins of whole milk by proteomics during milk powder processing**  
 Yaowei Liu, Lina Zhang, Peng Zhou, Xiaoming Liu  
 State Key Lab. of Food Sci. and Technol., Jiangnan Univ., China
- PD0615 Effects of brown rice products on glucose and lipid metabolism in MS rats fed with high-fat-sucrose diet**  
Xiaotong Zhai, Bin Tan, Runping Liang, Yanxiang Liu, Xiaohong Tian, Nana Wu, Liping Wang, Ming Liu  
 Academy of Natl. Food and Strategic Reserves Administration, China
- PD0618 Effects of polyphenol preservation liquid combined with vacuum packaging on the preservation of mackerel**  
Yuan-de Shi, Rui Ou Yang, Zhi-hui Wang, Li-peng Li, Wen-tao Chen, Lei-wen Xiang  
 Fuqing Branch, Fujian Normal Univ., China
- D) Others: R&D of Functional Foods and Nutraceuticals**
- PD0701 Effect of luteolin-rich “Kiku flower extract” on serum uric acid levels in Japanese male subjects with mild hyperuricemia**  
 Toru Takarada, Shogo Takeda, Norihito Shimizu, Marina Hirano, Hiroshi Shimoda  
 Oryza Oil & Fat Chemical Co., Ltd., Japan

- PD0702 Comparative analysis of rhodophyta extra and DHA algal oil formula for mitigation of dry eye symptoms induced by UVB irradiation in a mouse model**  
Tsung-Han Lu<sup>1</sup>, Ying-Chih Tung<sup>2</sup>, Chia-Yun Hsu<sup>1</sup>, Meng-Tien, Hsieh<sup>1</sup>, Ya-Jing Liu<sup>1</sup>, Han Hsin-Chang<sup>3</sup>, David Pei-Cheng Lin<sup>1</sup>  
<sup>1</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Taiyen Biotech Co., Ltd., Taiwan, <sup>3</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan
- PD0703 Comparison of antioxidant activity and DNA protection effect of *Chrysanthemum morifolium* Ramat with different solvents extraction**  
Chia-Ying Wang<sup>1</sup>, Yi-Hsuan Wu<sup>1</sup>, Kun-Lin Li<sup>1</sup>, Chun-Ping Lu<sup>2</sup>, Yi-Ping Yu<sup>1</sup>  
<sup>1</sup>Dept. of Nutr. and Health Sci., Chinese Culture Univ., Taiwan, <sup>2</sup>Dept. of Food Sci., FU JEN Catholic Univ., Taiwan
- PD0704 JUNSAIKOMACHI, a dietary supplement with water shield extract and sake cake dry powder**  
Keishi Hata<sup>1</sup>, Sayaka Tomatsu<sup>1</sup>, Yui Umekawa<sup>1</sup>, Akiko Takashima<sup>2</sup>, Munetaka Sano<sup>2</sup>  
<sup>1</sup>Akita Res. Inst. of Food & Brewing, Japan, <sup>2</sup>Sano Inc., Japan
- PD0705 Development of anti-infective oral care supplements using crude drugs containing functional ingredients**  
Yuriko Hoshino<sup>1</sup>, Enrei Taka<sup>1,2</sup>, Munehiro Hoshino<sup>3</sup>, Motonobu Goto<sup>4</sup>  
<sup>1</sup>M & A Food Technol. and Biol. of Tech. Cent. (M. A.F. T), Japan, <sup>2</sup>YU-KI Co., Ltd., Japan, <sup>3</sup>Maruboshi vinegar Co., Ltd., Japan, <sup>4</sup>Dept of Materials Process Eng., Nagoya Univ., Japan
- PD0706 Biological preparation of a functional extracted jujube juice containing low-calorie sugar**  
 Yan Men, Peng Chen, Jiao Li, Jiangang Yang, Yuanxia Sun  
 Tianjin Inst. of Ind. Biotechnol., Chinese Academy of Sci, China
- PD0707 Designs of functional peptides for oral intestinal delivery with a porous silica gel**  
Kento Imai<sup>1</sup>, Mijiti Maihemuti<sup>2</sup>, Kazunori Shimizu<sup>1</sup>, Satoshi Nagaoka<sup>2</sup>, Hiroyuki Honda<sup>1,3</sup>  
<sup>1</sup>Dept. of Biomolecular Eng., Grad. Sch. of Eng., Nagoya Univ., Japan, <sup>2</sup>Dept. of Appl. Life Sci., Fac. of Appl. Biol. Sci., Gifu Univ., Japan, <sup>3</sup>Innovative Res. Cent. for Preventive Med. Eng., Nagoya Univ., Japan
- PD0708 Evaluation of functional and sensory properties of Indonesian fermented rice bran**  
Ardiansyah<sup>1</sup>, Wahyudi David<sup>1</sup>, Annisa Oktriani<sup>1</sup>, Dody Dwi Handoko<sup>2</sup>, Slamet Budijanto<sup>3</sup>, Hitoshi Shirakawa<sup>4</sup>  
<sup>1</sup>Dept. of Food Tech. Univ., Bakrie, Indonesia, <sup>2</sup>Indonesian Agency for Agric. Res., and Dev., Ministry Agric., Indonesia, <sup>3</sup>Fac. of Agric. Eng. and Tech., Bogor Agric. Univ., Indonesia, <sup>4</sup>Lab. of Nutr. Grad. Sch. of Agric. Sci., Tohoku Univ., Japan



- PD0709 Studies on nutritional and antioxidative properties of raw and instant blue rices**  
Puspita Sari<sup>1</sup>, Nita Kuswardhani<sup>1</sup>, Maryanto<sup>1</sup>, Dewi Astuti<sup>1</sup>, Shafira<sup>1</sup>, Tomoyuki Yoshino<sup>2</sup>  
<sup>1</sup>Dept. of Agric. Product Technol., Fac. of Agric. Technol., Univ. of Jember, Indonesia, <sup>2</sup>Dept. of Life Sci., Fac. of Life and Environ. Sci., Pref. Univ. of Hiroshima, Japan
- PD0710 Acylation of anthocyanins isolated from berries and the lipophilic properties and antioxidant capacities of the corresponding derivatives**  
Jie Zheng, Shiyi Ou  
Dept. of Food Sci. and Eng., Jinan Univ., China
- PD0711 Attenuation of meniscal/ligamentous injury induced osteoarthritis progression in obese rats by shiikuwasha extract**  
Zwe-Ling Kong, Yu-Wen Yen, Ying-Jiun Lai  
Dept. of Food Sci., Natl. Taiwan Ocean Univ., Taiwan
- PD0712 Caffeine-induced acute P1 purinergic receptor activation in lacrimal glands leads to upregulation of tear secretion in a mouse model**  
Meng-Tien Hsieh<sup>1</sup>, Yu-Wen Kao<sup>1</sup>, Tsung-Han Lu<sup>1</sup>, Chia-Yun Hsu<sup>1</sup>, Ya-Jing Liu<sup>1</sup>, Han-Hsin Chang<sup>2</sup>, David Pei-Cheng Lin<sup>1</sup>  
<sup>1</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan
- PD0713 The effect of fermented wheat germ extract improves cancer-related fatigue receiving chemotherapy**  
Ming-Yi Liu<sup>1</sup>, Shu-Hui Hu<sup>2,3</sup>, Su-Fen Liu<sup>4</sup>, Sue-Joan Chang<sup>5</sup>  
<sup>1</sup>Dept. of Long-Term Care, Wu-Feng Univ., Taiwan, <sup>2</sup>Dept. of Med. Lab. Sci. and Biotechnol., Kaohsiung Med. Univ., Taiwan, <sup>3</sup>Dept. of Med. Res., Kaohsiung Med. Univ., Hosp., Taiwan, <sup>4</sup>Dept. of Nutr., Sin-Lau Hosp., Taiwan, <sup>5</sup>Dept. of Life Sci., Natl. Cheng Kung Univ., Taiwan
- PD0714 Effects of plum concentrate on blood glucose and antioxidative activity in type 2 diabetes mice**  
Yun-Shan Li<sup>1</sup>, Kazuaki Kawai<sup>1</sup>, Hiroshi Kasai<sup>1,2</sup>, Yuya Kawasaki<sup>1</sup>, Yuko Ootsuyama<sup>1</sup>  
<sup>1</sup>Dept. Environ. Oncol., Univ. Occup. Environ. Health, Japan, <sup>2</sup>OHG Inst., Japan
- PD0715 Stability of microencapsulated *Spirulina platensis* treated with basil leaf and different ratio of coating material against heating during storage**  
Tri Winarni Agustini, Ulfah Amalia, Retno Ayu Kurniasih  
Fac. of Fish. and Marine Sci., Diponegoro Univ., Indonesia
- PD0716 Development of dietary supplement pudding from egg white for elderly**  
Preeya Dat-arun, Vatcharee Seechamnaturakit  
IGS-NFF, Prince of Songkla Univ., Thailand

**PD0717 Patent active water protects endothelial EA. hy 926 cells from particulate matter 2.5 µm (PM2.5)-induced aging**Shwu-Ling Peng<sup>1</sup>, Chia-Jui Weng<sup>2</sup>, Shun-Fa Yang<sup>1,3</sup><sup>1</sup>*Inst. of Med., Chung Shan Med. Univ., Taiwan.*, <sup>2</sup>*Dept. of Living Services Ind., Tainan Univ. of Technol., Taiwan.*, <sup>3</sup>*Dept. of Med. Res., Chung Shan Med. Univ. Hosp., Taiwan***PD0718 The challenge and opportunity of using botanical ingredients in plant-based dietary supplements and functional foods**Charles (Chun) Hu*Nutriline Health Inst., USA***PD0719 The effect of rice protein and rice peptide on the hyaluronidase inhibitor Hui-Ju Chen<sup>1</sup>, Siao-Ling Fan<sup>2</sup>, Fan-Jhen Dai<sup>1,2</sup>, Yu-Chun Huang<sup>2</sup>, Chin-Shuh Chen<sup>1</sup>**<sup>1</sup>*Dept. of Food Sci. and Biotechnol., Natl. Chung Hsing Univ., Taiwan.*, <sup>2</sup>*Healthmate Co., Ltd., Taiwan***PD0720 Search for new food functionalities of euglena-derived carotenoid and extract on high-fat diet fed-mice**Neng Tanty Sofyana<sup>1</sup>, Matsumura Akimichi<sup>1</sup>, Aoi Nakao<sup>1</sup>, Ayaka Nakashima<sup>2</sup>, Kengo Suzuki<sup>2</sup>, Yuki Manabe<sup>1</sup>, Tatsuya Sugawara<sup>1</sup><sup>1</sup>*Dept. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan.*, <sup>2</sup>*euglena Co., Ltd., Japan***PD0726 The prebiotic factors of fresh and chip lesser yam (*Dioscorea esculenta*) by simulation model of human colonic microbiota in batch culture fermentation**Adrian Hilman<sup>1</sup>, Ani Harmayani<sup>2</sup>, Muhammad Nur Cahyanto<sup>2</sup>, Santad Wichienchot<sup>3</sup><sup>1</sup>*Dept. of Food Sci. and Tech., Fac. of Agric, Univ. Sumatera Utara, Indonesia.*, <sup>2</sup>*Dept. of Food and Agric. Prod. Tech., Fac. of Agric. Tech., Univ. Gadjah Mada, Indonesia.*, <sup>3</sup>*Interdisc. Grad. Sch. of Nutraceutical and Funct. Food, Prince of Songkla Univ., Thailand***PD0729 The effect of molecular structure of starch depolymerisation products, obtained by controlled microwave heating, on their in vitro enzyme-resistance**Kamila Kapuśniak<sup>1</sup>, Justyna Rosicka-Kaczmarek<sup>2</sup>, Joana Lopes<sup>3</sup>, Idalina Gonçalves<sup>3</sup>, Manuel António Coimbra<sup>3</sup><sup>1</sup>*Dept. of Dietetics and Food Studies, Jan Dlugosz Univ., Poland.*, <sup>2</sup>*Dept. Starch Technol. and Confectionery, Lodz Univ. of Technol., Poland.*, <sup>3</sup>*Dept. of Chem., Univ. of Aveiro, Portugal***D) Others: Taste and Olfaction****PD0801 Earthy off-flavor in grey mullets cultivated in Hong Kong fish ponds**Hau Yin Chung, Yan Ping Chen, Kwok Cheong Chung*Food & Nutr. Sci. Prog., Sch. of Life Sci., Chinese Univ. of Hong Kong, China*

**PD0802 Identification of key off-flavor compounds in thermal-treated watermelon juice by GC-MS/O, aroma recombination, and omission experiments**

Xiao Yang<sup>1,3</sup>, Ye Liu<sup>1,3</sup>, Fan Yang<sup>1,3</sup>, Jian Li<sup>1,3</sup>, Huan-Lu Song<sup>1,2,3</sup>

<sup>1</sup>Beijing Eng. and Technol. Res. Cent. of Food Additives, China, <sup>2</sup>Beijing Advanced Innovation Cent. for Food Nutr. and Human Health, China, <sup>3</sup>Sch. of Food and Chem. Eng., Beijing Technol. and Business Univ., China

**PD0803 Volatile flavor compounds in Chinese fried food of youtiao**

Jianchun Xie<sup>1</sup>, Wenbin Du<sup>1</sup>, Tianze Wang<sup>1</sup>, Jia Tan<sup>1</sup>, Dawei Zhen<sup>2</sup>, Mengyao Zhao<sup>1</sup>

<sup>1</sup>Beijing Advanced Innovation Cent. for Food Nutr. and Human Health, Beijing Lab. for Food Quality and Safety, Beijing Technol. and Business Univ., China, <sup>2</sup>Beijing Lanjingzhongyu Sci. Dev. Co., Ltd., China

**D) Others: Others**

**PD0901 Robust and human-specific lipid profile in human hepatocytes freshly isolated from chimeric mice with humanized liver**

Masakazu Kakuni<sup>1</sup>, Masaki Takahashi<sup>1</sup>, Akira Sasaki<sup>2</sup>, Keishi Hata<sup>2</sup>

<sup>1</sup>PhoenixBio Co., Ltd., Japan, <sup>2</sup>Akita Res. Inst. of Food and Brewing., Japan

**PD0902 Renal histopathology under the influence of *Klotho* gene deficiency**

Yu-Shan Tseng<sup>1</sup>, Bao-Sheng Xu<sup>1</sup>, David Pei-Cheng Lin<sup>2</sup>, Han-Hsin Chang<sup>1</sup>

<sup>1</sup>Dept. of Nutr., Chung Shan Med. Univ., Taiwan, <sup>2</sup>Dept. of Med. Lab. and Biotechnol., Chung Shan Med. Univ., Taiwan

**PD0903 PXB-cells<sup>®</sup> alter lipid metabolism in response to antihyperlipidemic drugs**

Masaki Takahashi<sup>1</sup>, Masakazu Kakuni<sup>1</sup>, Keishi Hata<sup>2</sup>

<sup>1</sup>PhoenixBio Co., Ltd, Japan, <sup>2</sup>Akita Res. Inst. of Food and Brewing, Japan

**PD0904 Functional foods – Regulatory update for USA and Canada**

Jerzy Zawistowski

Fac. of Land and Food Systems, Food, Nutr. and Health, Univ. of British Columbia, Canada

**PD0905 Chitosan-based film incorporated with essential oils nanoemulsions foreseeing enhanced antimicrobial effect**

Samar Elshamy<sup>1</sup>, Isao Kobayashi<sup>1,3</sup>, Kunihiro Uemura<sup>1,3</sup>, Mitsutoshi Nakajima<sup>1,2,3</sup>, Marcos A. Neves<sup>1,2,3</sup>

<sup>1</sup>Tsukuba Life Sci. Innova. Prog. (T-LSI), Tsukuba Univ., Japan, <sup>2</sup>Grad. Sch. of Life and Environ. Sci., Tsukuba Univ., Japan, <sup>3</sup>Food Res. Inst., NARO, Japan

**PD0906 Analysis of immuno fecal occult blood testing positive ratios in different age groups in Taiwan**

Ming Hui Chen<sup>1,2</sup>, Bio Chia Show<sup>1</sup>, Tsung Han Lu<sup>3</sup>, Wen Hung Lin<sup>1</sup>, Han Hsin Chang<sup>3</sup>, David Pei Cheng Lin<sup>3</sup>

<sup>1</sup>Tungs' Taichung MetroHarbor Hosp., Taiwan, <sup>2</sup>Jenteh Junior Coll. of Med., Nursing and Management, Taiwan, <sup>3</sup>Chung Shan Med. Univ., Taiwan

**PD0907 Application to *in vitro* by o/w emulsification of oily functional ingredient**

Tomoki Kugimaru<sup>1</sup>, De-xing Hou<sup>1,2</sup>, Kozue Sakao<sup>1,2</sup>

<sup>1</sup>Dept. of Food Sci. and Technol., Grad. Sch. of Agric., Forest. and Fish., Kagoshima Univ., Japan,

<sup>2</sup>Course of Biol. Sci. and Technol., The United Grad. Sch. of Agric. Sci., Kagoshima Univ., Japan

**PD0908 Hydrolase inhibitor screening to decrease drug side effects**

Kaori Yasuda<sup>1</sup>, Kazuki Watanabe<sup>1</sup>, Shinichi Ikushiro<sup>1</sup>, Tatsuki Fukami<sup>2,3</sup>, Miki Nakajima<sup>2,3</sup>, Toshiyuki Sakaki<sup>1</sup>

<sup>1</sup>Fac. of Eng., Toyama Pref. Univ., Japan, <sup>2</sup>Fac. of Pharm. Sci., Kanazawa Univ., Japan, <sup>3</sup>Nano Life Sci. Inst. Kanazawa Univ., Japan

**PD0909 Development of a cell-based screening assay system for identifying modulator of cytokine function**

Hirotsada Kojima

Osaka City Univ, Grad. Sch. Med., Japan

## December 2

### Luncheon Seminar 1

12:15-13:15 Room A

Sponsored by Daicel Corporation

#### Dietary ceramides in skin and brain health

Chair: Yasuyuki Igarashi (Hokkaido Univ., Japan)

**LS01 Dietary ceramides in skin and brain health**

12:15 [Kohei Yuyama](#)

*Fac. of Advanced Life Sci., Hokkaido Univ., Japan*

### Luncheon Seminar 2

12:15-13:15 Room B

Sponsored by Ezaki Glico Co., Ltd.

#### Lipid peroxidation

Chair: Yoshinobu Terada (Ezaki Glico. Co., Ltd., Japan)

**LS02 How do edible oils and biological lipids deteriorate? Clarification by LC-MS/MS**

12:15

[Kiyotaka Nakagawa](#)

*Grad. Sch. of Agric. Sci., Tohoku Univ., Japan*

### Luncheon Seminar 3

12:15-13:15 Room C

Sponsored by Fuji Oil Co., Ltd.

#### Investigation of a preventive method for non-alcoholic fatty liver disease by food materials

Chair: Yoshiaki Kido (Kobe Univ., Japan)

**LS03 Investigation of a preventive method for non-alcoholic fatty liver disease by food materials**

12:15

[Hiroshi Inoue](#), Hitoshi Watanabe, Yuka Inaba

*Inst. for Frontier Sci. Initiative, Kanazawa Univ., Japan*

**Luncheon Seminar 4****12:15-13:15 Room D****Sponsored by Nitto Pharmaceutical Industries, LTD.****Novel approach to food and health by lactic acids bacteria products exopolysaccharides****Chair:** Kenji Yamamoto (Kyoto Univ./Ishikawa Pref. Univ., Japan)**LS04-1 The evaluation of host metabolic benefits by dietary intake of exopolysaccharides derived from lactic acid bacteria**

12:15

Ikuo Kimura<sup>1,2</sup><sup>1</sup>*Dept. of Appl. Biol. Sci, Grad. Sch. of Agri., Tokyo Univ. of Agri and Tech., Japan,*<sup>2</sup>*AMED-CREST, Japan Agency for Medical Res. and Dev., Japan***LS04-2 Gut microbiota and environment as therapeutic targets in patients with metabolic diseases**

12:45

Junichiro Irie<sup>1,2</sup>, Hiroshi Itoh<sup>1,2</sup><sup>1</sup>*Div. of Endocrinol, Metab and Nephrol, Dept. of Intern Med., Keio Univ. Sch. of Med., Japan,*<sup>2</sup>*AMED-CREST, Japan Agency for Medical Res. and Dev., Japan***Luncheon Seminar 5****12:15-13:15 Room E****Sponsored by PHARMA FOODS INTERNATIONAL CO., LTD. & ja.z-tamago.Co., Ltd.****The Hidden Health-Related Jewels from Egg****Chair:** Lekh R. Juneja (ROHTO Pharmaceutical Co.,Ltd., Japan)**LS05-1 Incidence of “autism secondary to folic acid deficiency” in autism spectrum and efficacy of the dietetic therapy with “Folate-enriched Egg (F-eEgg)”**

12:15

Shizuo Oji<sup>1,2,3</sup>, Takuichi Makino<sup>4</sup>, Mujoy Kim<sup>3</sup><sup>1</sup>*“Developmental Brain Out-patients Clinic”, Oi Clinic, Japan,*<sup>2</sup>*Pediatric Neurosurgery, Intl. Neuroscience Inst. [INI], Germany,*<sup>3</sup>*PHARMA FOODS INTERNATIONAL CO.,LTD, Japan,*<sup>4</sup>*JA ZEN-NOH Tamago Co., Ltd, Japan***LS05-2 Novel bioactive peptides derived from egg-yolk: Promotion of bone and cartilage growth, maintenance and regeneration**

12:35

Denise Zujur<sup>1</sup>, Chihiro Awada<sup>1</sup>, Utano Nakamura<sup>1</sup>, Kiyoshi Miwa<sup>1</sup>, Yoshiaki Kitaura<sup>2</sup>, Hironori Hojo<sup>2,3</sup>, Ung-il Chung<sup>2,3</sup>, Shinsuke Ohba<sup>4</sup>, Mujo Kim<sup>1</sup><sup>1</sup>*Pharma Foods International Co., Ltd., Japan,*<sup>2</sup>*Dept. of Bioengineering, The Univ. of Tokyo, Japan,*<sup>3</sup>*Cent. for Disease Biol. and Integrative Med., The Univ. of Tokyo, Japan,*<sup>4</sup>*Dept. of Cell Biol., Inst. of Biomedical Sciences, Nagasaki Univ., Japan*

**LS05-3 From the egg to the hair: a novel peptide derived from egg yolk that induces hair growth**  
12:55

Md Saddam Hossain<sup>1</sup>, Toshio Nakamura<sup>1</sup>, Kyungho Park<sup>2</sup>, Yoshikazu Uchida<sup>1</sup>, Atsushi Yamatsu<sup>1</sup>, Noriko Horie<sup>1</sup>, Mujo Kim<sup>1</sup>, Satoshi Itami<sup>3</sup>

<sup>1</sup>Pharma Foods International Co. Ltd., Japan, <sup>2</sup>Dept. of Food Sci. and Nutr., Hallym Univ., Gangwon-do, Korea, <sup>3</sup>Dept. of Regenerative Dermatology, Osaka Univ. Grad. Sch. of Med., Japan

**Luncheon Seminar 6**

**12:15-13:15 Room F**

**Sponsored by Nisshin Seifun Group Inc.**

**Chrono-nutrition studies on sleep and metabolism**

**Chair:** Satomi Nozaki (Nisshin Seifun Group Inc., Japan)

**LS06 Chrono-nutrition studies on sleep and metabolism**

12:15 Katsutaka Oishi<sup>1,2,3,4</sup>

<sup>1</sup>Biol. Clock Res. Gr., AIST, Japan, <sup>2</sup>Grad. Sch. of Frontier Sci., The Univ. of Tokyo, Japan, <sup>3</sup>Facul. of Sci. and Technol., Tokyo Univ. of Sci., Japan, <sup>4</sup>SIGMA, Univ. of Tsukuba, Japan

## December 3

### Luncheon Seminar 7

12:15-13:15 Room A

Sponsored by TAIYO KAGAKU CO., LTD

#### Intestinal studies of catechin (EGCG)

Chair: Junji Terao (Konan Women's Univ., Japan)

**LS07**    **Epigallocatechin-3-gallate (EGCG) attenuates non-alcoholic fatty liver disease via modulating the interaction between gut microbiota and bile acids**

12:15

Yuji Naito

*Dept. of Gastroenterology and Hepatology, Kyoto Pref. Univ. of Med., Japan*

### Luncheon Seminar 8

12:15-13:15 Room B

Sponsored by Clinical Trial Center for Functional Foods, Chonbuk Natl. Univ. Hosp.

#### Clinical Trial Center for Functional Foods in Korea

Chairs: Byung-Hyun Park (Chonbuk Natl. Univ. Med. Sch., Republic of Korea)  
Eun Ju Bae (Chonbuk Natl. Univ., Republic of Korea)

**LS08-1**    **Challenges for developing functional foods**

12:15    Eun-Kyung Choi

*Clinical Trial Center for Functional Foods, Chonbuk Natl. Univ. Hosp., Korea*

**LS08-2**    **Prevalence and associated risk factors of prediabetes in Korean population: A cross-sectional study**

12:35

Byung Hyun Park

*Dept. of Biochem., Chonbuk Natl. Univ. Med. Sch., Korea*

**LS08-3**    **The associations between liver enzymes and the risk of cardiovascular diseases in Koreans with mild dyslipidemia**

12:55

Eun Ju Bae

*College of Pharmacy, Chonbuk Natl. Univ., Korea*



**Luncheon Seminar 9****12:15-13:15 Room C****Sponsored by Sun Chlorella Corp.****Active compounds in chlorella for human health****Chair:** Tatsuya Sugawara (Kyoto Univ., Japan)**LS09 Presence of monoamines in hot water extract of chlorella****12:15 -Possible bioactive compounds in chlorella**

Kenji Sato

*Div. of Appl. Biosci., Grad. Sch. of Agric., Kyoto Univ., Japan***Luncheon Seminar 10****12:15-13:15 Room D****Sponsored by NUTRILITE****Plants for nutrition and wellness – Ensuring authenticity, purity, safety and efficacy****Chair:** Colleen Carkeet (Amway Co., USA)**LS10-1 Botanicals: Science behind traceability****12:15** Amit Chandra*Chromatography, Analytical Sci. R&D, Amway Co., USA***LS10-2 Ayurveda / Traditional medicine: Concept and health benefits based on botanicals****12:40**

Padma Venkat

*Sch. of Public Health, SRM Inst. of Sci. and Technol., India***13:35 Panel Discussion****Luncheon Seminar 11****12:15-13:15 Room E****Sponsored by Maruha Nichiro Corporation****Overview of clinical trial system for functional foods in Hokkaido, Japan****Chair:** Kazuo Miyashita (Hokkaido Univ., Japan)**LS11 Overview of clinical trial system for functional foods in Hokkaido, Japan****12:15** Jun Nishihira*Dept. of Med. Management Informatics, Hokkaido Information Univ., Japan*

**Luncheon Seminar 12**

**12:15-13:15 Room F**

**Sponsored by** Agilent Technologies, Inc.

**Study of metabolism for polyphenols using LC/MS/MS and metabolomics of Japanese green tea “Kaga Boucha” using GC/MS**

**Chair:** Hiroshi Hara (Fuji Women's Univ., Japan)

**LS12 Study of metabolism for polyphenols using LC/MS/MS and metabolomics of Japanese green tea “Kaga Boucha” using GC/MS**

12:15

Seiya Tanaka<sup>1</sup>, Takaaki Ishibashi<sup>1</sup>, Tetsuya Sasaki<sup>2</sup>

*<sup>1</sup>Agilent Technologies, Inc., Japan, <sup>2</sup>Industrial Res. Inst. of Ishikawa, Japan*

## December 4

### Luncheon Seminar 13

12:15-13:15 Room A

Sponsored by SCIEX

#### New approaches for Functional food analysis using LC-MS/MS

Chair: Ushio Takeda (SCIEX, Japan)

#### LS13 New approaches for Functional food analysis using LC-MS/MS

12:15 Teruo Miyazawa

*New Industry Creation Hatchery Center, Tohoku Univ., Japan*

### Luncheon Seminar 14

12:15-13:15 Room B

Sponsored by POLA ORBIS HOLDINGS INC.

#### Frontline research of diets for skincare

Chair: Mikio Kinoshita (Obihiro Univ., Japan)

#### LS14 Frontline research of foods for skincare –Regarding Plant-derived 12:15 Glucosylceramides and Pterocarpus Marsupium Heartwood Extract–

Tatsuya Sugawara<sup>1</sup>, S. Hirakawa<sup>2</sup>, M. Kinoshita<sup>3</sup>

<sup>1</sup>*Div. of Appl. Biosci., Grad. Sch. of Agric. Kyoto Univ., Japan,* <sup>2</sup>*Mult. Intelli. Res.*

*Cent., Pola Orbis HD Inc., Japan,* <sup>3</sup>*Dept. of Food Sci., Obihiro Univ. of Agric. and Vet. Med., Japan*

### Luncheon Seminar 15

12:15-13:15 Room C

Sponsored by Nippon Flour Mills Co., Ltd.

#### Functional Foods Components and Exercise

Chair: Shinji Okada (Univ. of Tokyo, Japan)

#### LS15-1 Frontiers in fatality prevention in area of sport science

12:15 Tomohiro Okura

*Fac. of Health and Sport Sci., Univ. of Tsukuba, Japan*

#### LS15-2 Maslinic acid could be effective in preventing mobility-related disability

12:55 Yuki Yamauchi

*Nippon Flour Mills Co., Ltd., Japan*

## Luncheon Seminar 16

12:15-13:15 Room D

Sponsored by Kewpie Corporation

### The healthy & nutritional properties of eggs –Promoting better & happier life–

Chair: Keiko Abe (Univ. of Tokyo., Japan)

**LS16 The healthy and nutritional properties of eggs –Promoting better & happier life–**

12:15 Masao Sato

*Dept. of Biosci. and Biotechnol., Fac. of Agric, Grad. Sch., Kyushu Univ., Japan*

## Luncheon Seminar 17

12:15-13:15 Room E

Sponsored by MIYARISAN PHARMACEUTICAL CO., LTD.

### Bug and cancer

Chair: Yuji Naito (Kyoto Pref. Univ. of Med., Japan)

**LS17 Bug and cancer**

12:15 Osamu Handa

*Dept. of Gastroenterology, Kawasaki Med. Sch., Japan*

## Luncheon Seminar 18

12:15-13:15 Room F

Sponsored by Association for Salacia Promotion

### Salacia, an ayurvedic traditional medicine, as a prominent natural resource for the functional food claiming anti-diabetes

Chair: Masayuki Yoshikawa (Professor Emeritus, Kyoto Pharmaceutical Univ., Japan)

**LS18 Salacia, an ayurvedic traditional medicine, as a prominent natural resource for the functional foods claiming anti-diabetes**

12:15 Osamu Muraoka

*Professor Emeritus, Kindai Univ., Japan*

# Author Index

Name	Abstract	Name	Abstract	Name	Abstract
<b>A</b>					
Abe, Aya	<b>PB0812</b>	Alashi, Adeola M.	SY18-1	Asai, Tomoko	PB0605
Abe, Chizumi	SY04-5/ YIA-18 <b>PC0402/ YIA-10</b>	Alfarafisa, Nayla Majeda	<b>PA0214</b>		PB0613
		Aluko, Rotimi E.	<b>SY18-1</b>		<b>PC1808/ FT1-04</b>
Abe, Keiko	SY13-5 PB0812	Álvarez-Parrilla, E	SY03-6	Asano, Satoshi	PB1007
Abe, Masato	PC0611	Amagase, Harunobu	<b>SY02-1</b>		<b>PB1011</b>
Abe, Ryosuke	PB0608/ FT1-12	Amalia, Ulfah	PD0715/ FT2-08	Ashida, Hitoshi	SY12-5
Abe, Shimon	PB0617	Amornlerdpison, Doungporn	<b>PA0508</b>		SY41-3
Abe, Shogo	<b>PC1406</b>		PA0509		PA0604
Abe, Takuya	PC1016	Andarwulan, Nuri	PB0417		PB0203
Abe-Kanoh, Naomi	<b>PB0716</b>	Ando, Akinori	PB0418		PB0204
	<b>PB1101</b>	Ando, Reika	<b>PA0709</b>		PB0907/ YIA-13
Abiru, Rino	PB0104/ YIA-05	Anggrahini, Sri	SY35-3		PC0902/ YIA-23
Adachi, Noritaka	PB0715	Ano, Yasuhisa	PC0206		PC0904
Adachi, Takahiro	PD0203		PA0103		PC1014
Adachi, Yoshiyuki	<b>SY38-4</b>	Anstey, Kaarin J.	<b>PC0610/ YIA-21</b>		<b>PC1315</b>
Adedayo, Adesina Precious	<b>PC1207/ YIA-31</b>	Antoinette Halim, Evelyn	PB1107		<b>PC1403</b>
Aditiawati, Pingkan	SY10-4/ YIA-01	Ao, Misora	<b>PC1314</b>		PC1604
Agostinelli, Enzo	<b>SY19-2</b>	Aoi, Wataru	SY32-5		PC1806
Agustini, Tri Winarni	<b>PD0715/ FT2-08</b>	Aoki, Kai	<b>SY55-4</b>		PC1902/ YIA-35
Agyei, Dominic	<b>PB0611/ FT1-02</b>	Aoki, Mao	PC1016		PC1902/ YIA-35
	<b>PB0806</b>	Aoki, Yudai	PB1101	Astawan, Made	SY10-4/ YIA-01
Ahn, Chang-Won	PD0101	Aono, Megumi	PC1903		PD0709/ FT2-07
Ahn, Mok-Ryeon	<b>PB0706</b>	Aoyama, Hiroki	<b>PC1906</b>	Astuti, Dewi	PC0804
	<b>PC1405</b>	Apiboon, Pavina	PA0705	Atsuchi, Nobuhiko	PC0804
Aida, Kazuhiko	PC1804	Apri Astuti, Dewi	PC1323/ YIA-33	Atsuchi, Yoshihiko	PC0804
Aida, Mio	PD0202		<b>PC1334</b>	Awada Chihiro	LS05-2
Aizawa, Koichi	SY57-3 SY57-4 <b>PB0811</b>	Ara, Takeshi	PC0505/ FT3-14	Aya, Megumi	PC1403
	PC0404/ YIA-17	Ara, Takeshi	SY57-2	Azis, Lukman	PC1208/ FT1-14
	PC0805 PC1313	Ara, Yumi	<b>SY57-3</b>		
	PC1903 PC1906	Ara, Hidenori	<b>PC1404</b>		
Akagawa, Mitsugu	PB0908/ YIA-12 <b>PC1327</b>	Arai, Hirofumi	SY01-3		
	PC1601 PC1604		<b>PB0722</b>		
Akaki, Junji	PC1336	Arai, Norie	PC0105	Baba, Misato	PA0402
Akanbi, Taiwo	SY36-6	Arai, Tasuku	PC0108	Bäckhed, Fredrik	SY07-1
Akasaki, Nobuhiko	SY47-3	Arai, Tsunetaka	PC1015	Bae, Eun Ju	LS08-2
Aksono, E. Bimo	PA0311/ FT2-01	Arakawa, Kohta	<b>PC0719</b>		<b>LS08-3</b>
Alasalvar, Cesaretin	<b>SY08-1</b>	Araki, Risa	PC0713	Bae, Jaehoon	<b>PB0202</b>
		Ardiansyah	<b>PC1401</b>		<b>PC1408</b>
			SY53-4	Bagal-Kestwal, Dipali	<b>PD0113</b>
		Ariki, Shingo	<b>PB0410</b>	Bai, Miaomiao	<b>PD0114</b>
		Arima, Takeshi	<b>PD0708/ FT2-03</b>	Bak, Juneha	SY26-4
			SY43-4	Bannenber, Gerard	<b>SY38-5</b>
		Arima, Yu	PB0105/ YIA-04	Barczynska, Renata	<b>SY35-5</b>
			<b>PB0810/ YIA-11</b>	Bargiacchi, Enrica	SY48-5
		Arimitsu, Hideyuki	SY17-6/ YIA-30	Barrow, Colin J.	<b>PA0209</b>
			PA0213	Belgis, Maria	<b>SY36-6</b>
		Arimoto-Kobayashi, Sakae	SY24-2	Beppu, Fumiaki	PA0702
		Aristoy, M-Concepcion	<b>SY35-1</b>		<b>SY09-2</b>
		Arita, Makoto	PD0610	Bermudezand, L.	PA0504/ FT3-01
		Artanti, Nina		Bertinato, Jesse	SY48-4
				Betto, Daisuke	PB0101
					PC0715

Name	Abstract	Name	Abstract	Name	Abstract
Bhargava, Priyanshu	PC0705		PC1213/ FT1-15	Chen, Lei	PC1407 PA0108/ FT1-13
Bi, Weiwei	<b>PA0108/ FT1-13</b>		PC1320/ FT3-05	Chen, Liang	<b>PB0620/ FT1-07</b>
Bielinski, Donna F.	SY21-4		PC1904	Chen, Li-Chen	PD0604
Bito, Tomohiro	PA0212		PC1907	Chen, Li-Ching	PA0710
	PB1005		PD0502	Chen, Ming Hui	<b>PD0906</b>
	PB1006		PD0702/ FT3-09	Chen, Peng	PD0706
	PC0806		PD0712/ YIA-40	Chen, Po-Hsuan	PC0609
	<b>PC1702</b>		PD0902/ FT3-07	Chen, Rong-Jane	<b>PA0221</b>
Blair, Christopher A.	SY33-2		PD0906	Chen, Sheng	PC0722
Blekkenhorst, Lauren	PB1107	Chang, Hui-Yi	PB1004	Chen, Sheng-Yi	PA0802/ FT1-10
Bliss, Daniel W.	SY40-3	Chang, Min-Chun	<b>PB1002</b>	Chen, Shih- Hsin	SY12-4
Boeglin, William E.	SY44-1		PC1213/ FT1-15	Chen, Shih-Ying	PD0604
Bolling, Bradley W.	<b>SY17-5</b>		<b>PC1320/ FT3-05</b>	Chen, Wen	PC0720
Bondonno, Catherine P.	SY06-4		PA0814	Chen, Wen-tao	<b>PB0108</b>
	<b>PB1107</b>		<b>PD0304/ FT3-08</b>	Chen, Yan Ping	PD0618/ FT3-15
	SY06-4	Chang, Ming-Min	PA0814	Chen, Ya-Ting	PD0801
	PB1107	Chang, Po-Sheng	<b>PD0304/ FT3-08</b>	Chen, Yen-Lien	PC0703/ FT1-06
	PB1008	Chang, Sue-Joan	<b>SY55-1</b>	Chen, Yi-Chen	PC1911
Bonto, Aldrin P.	PSY-2		PB1103	Chen, Yue-Jhu	<b>PC1301</b>
Borges Gina	SY48-4	Chang, Wei-Tang	PD0713	Chen, Yu-Kuo	<b>PC0613</b>
Bridonneau, C.	SY25-4	Chang, Wen-Chang	PC1304		SY23-5
Brown, Kevin S.	PD0708/ FT2-03	Chang, Wen-Jui	<b>PC0704</b>		PC0613
Budijanto, Slamet		Chang, You-Wei	PC0602		PC0614
		Chang, Yun-Ching	PB1103		PC0810
		Chapman, Dawn	<b>PC0714</b>		PC1210
		Charikornkul, Arpamas	PL2	Chen, Zhen-Yu	PC1324
		Charles, Albert Linton	PC0707		PC1325
		Charoensin, Suphachai	PB0727/ FT1-03		PC0801
		Chatel, J.M.	FT1-03	Chen, Zhongxiu	PC0807
		Chaves-Filho, Adriano B.	PB0720/ FT2-05	Cheng, Jianjun	<b>PB0416</b>
		Chawalitpong, Supatta	SY48-4	Cheng, Kuan-Chen	<b>PA0807</b>
		Chawalitpong, Supattra	SY27-1	Cheng, Meng-Chun	PC1328
		Chazono, Kanako	PC0615	Cheung, Michelle	PA0110
		Che, Yixin	PC1809	Chiang, Been Huang	SY36-3
		Chelikani, Prashen	<b>PC0301</b>	Chiang, Chien-Hsing	PD0113
		Chen, Chin-Chu	PA0101	Chiang, Meng-Tsan	PC1210
		Chen, Chin-Shuh	SY18-1		<b>SY09-1</b>
		Chen, De-Jing	SY53-3		SY55-5
		Chen, Hui-Huang	PC1911	Chiou, Yi-Shiou	<b>PC0209</b>
		Chen, Hui-Ju	PD0719	Chiu, Chen-Yuan	PC0718
		Chen, Jr-Wei	<b>PA0712</b>		SY09-1
		Chen, June-Ru	PB0616	Chiu, Ching-Ju	SY55-5
		Chen, Keyu	<b>PD0604</b>		PD0304/ FT3-08
			<b>PD0719</b>	Chiu, Chun-Hui	<b>PA0201</b>
			PC1301		PB1004
			PC0609	Cho, Jeong-Yong	SY03-2
			<b>PB0808</b>	Cho, Sang Min	PA0505
			PC1329		PA0506

Name	Abstract	Name	Abstract	Name	Abstract
Cho, Sueungmok	SY09-4	Dong, Weixue	PA0712	Fujie, Keiko	PB0410
Choi, Eun-Kyung	<b>LS08-1</b>	Dong, Zigang	<b>KL2</b>	Fujii, Nana	PA0213
	LS08-2		SY12-5	Fujii, Yasuyuki	<b>SY13-5</b>
	LS08-3		PC0702		PA0707
Choi, H.S.	<b>PC0506</b>	Dorsilla Anono, Katimbwa	<b>PC1319</b>		PC0805
Choi, Hyunjung	<b>PC1913</b>	dos Santos, Ancely F.	PD0106/	Fujimoto, Moe	SY33-6
	PC1914		YIA-36	Fujimura, Shinobu	PA0405
Choi, In Suk	PC1201	Du, Lei	<b>PB0415</b>	Fujimura, Yoshinori	SY22-2
Choi, Joo-Hee	PC0102		PC1705		PB0721/
Choi, Soo-Im	SY09-4	Du, Wenbin	PD0803		YIA-09
Chottanom, Pheeraya	PA0602	Du, Yi-Nan	PB0616		PC1101
Chou, Ya-Chun	<b>PC0712</b>	Duh, Pin-Der	<b>PC0720</b>		PC1408
Christina, Clara	PA0810	Dutta, Arindam	SY40-3	Fujimura, Yushi	<b>PA0104</b>
Chu, Chin-Chen	PC0720	Dwivany, Fenny M.	PA0217	Fujishima, Sae	SY44-2
Chu, Fang-Yi	<b>PC1213/</b>	Dyer, Jolon M.	<b>SY11-2</b>	Fujita, Mariko	SY27-5/
	<b>FT1-15</b>	Dziadek, Kinga	SY36-5		YIA-24
Chu, Heuy-Ling	PC0720				PC1011
Chu, Yu-Chi	PC1308/	<b>E</b>			<b>PC1013</b>
	FT3-12	Egashira, Yukari	PA0307	Fujitate, Natsumi	PA0215
Chung, Chieh	PA0817		PA0309	Fujiwara, Yoshifumi	PB0614
Chung, Dai-Jung	PC0714		PC1306	Fukami, Tatsuki	PD0908
Chung, Hau Yin	<b>PD0801</b>		PC1318	Fukata, Kousuke	PC0101
Chung, Kwok Cheong	PD0801	Egusa, Ai	<b>PC1005</b>		PC0601
Chung, Ung-il	LS05-2	Eitsuka, Takahiro	PB0707	Fukaya, Keisuke	PC0408
Chyau, Charng-Cherng	PC0720		PC1803	Fuke, Nobuo	PB0811
Coimbra, Manuel A.	PD0729	Ejima, Akika	SY30-5	Fukii, Shinji	PC1311
Corpuz, Mary Jho-Anne	SY38-1		PD0112/	Fukuda, Itsuko	<b>SY48-1</b>
Croft, Kevin D.	<b>KL5</b>		FT1-09		PB0809
	<b>SY06-4</b>	Elshamy, Samar	<b>PD0905</b>	Fukuda, Shinji	PC1209
	PB1107	Endo, Daiki	PC0713	Fukuda, Teppei	SY33-6
Crozier, Alan	<b>PSY-2</b>	Endo, Shin	PC1015	Fukuda, Toru	<b>SY46-1</b>
Cuadrado, Tatiana	SY49-2	Enoki, Yasuaki	PA0405	Fukuda, Yota	<b>PD0203</b>
		Enomoto, Yasuhiro	<b>PB0704</b>	Fukuhara, Taito	PC0104
		Epriliati, Indah	<b>PA0810</b>	Fukumura, Midori	<b>PB0102</b>
			<b>PD0401</b>	Fukunaga, Kenji	PB0722
		Espin, Juan C.	SY13-1	Fukunaga, Taiji	SY43-4
				Fukusaki, Eiichiro	SY10-4/
<b>D</b>					YIA-01
Dai, Fan-Jhen	PD0719				<b>SY25-2</b>
Daimaru, Kyohei	PA0213	<b>F</b>			PA0217
Daly, Robin M.	PB1107	Fan, Jinling	<b>PB0207</b>	Fukushima, Nobuyuki	PB0412
Dantas, Lucas S.	SY27-1	Fan, Siao-Ling	PD0719	Furukawa, Ayako	PB1007
Danton, Ombeline	PB0729	Farah Rahim, Kartini	SY32-2/		<b>PC0708</b>
Dat-arun, Preeya	PB0807		YIA-38		PD0104
	<b>PD0716</b>	Faria, Rodrigo L.	SY27-1	Furusho, Noriko	<b>PC1004</b>
	PA0503	Fawaz, Bagoudou Abdel	<b>PC0615</b>	Furutachi, Yuki	<b>PB0109</b>
	PD0708/	Feng, Changxing	PB0103	Furutani, Ayano	PC0603
	FT2-03	Firdausia, Rizqa Salsabila	PA0808/	Furuya, Shigeki	PB0203
de Beer, Dalene	<b>PB0729</b>		FT2-10	Furuyashiki, Takashi	PB0204
de St. Maurice, Greg	<b>SY01-4</b>	Fisher, Derek R.	SY21-4		PC1806
de Villiers, Andre	PB0729	FitzGerald, Richard J.	<b>SY18-2</b>		PC0713
Delabandara, Roshan	<b>PA0813</b>		SY24-4	Fusegi, Momoka	<b>PC0805</b>
Desaka, Natsumi	PC0208	Fogliano, Vincenzo	<b>PSY-1</b>	Fushimi, Taiki	
Desjardins, Yves	<b>SY13-2</b>	Fong, Reedmond	PSY-2		
Dewardari, Kun Tanti	PA0702	Fraga, Cesar G.	<b>PL6</b>		
Dhanjal, Jaspreet Kaur	PC0704		<b>PSY-4</b>		
Die, Irma van	SY38-3	Franklin, Lillian	PL2		
Ding, Yangyue	PA0807	Fu, Jing	<b>SY05-6</b>		
Dohgu, Shinya	PB0612/				
	YIA-07				
				<b>G</b>	
				Gallego, Marta	SY24-2
				Ganapathy, Vadivel	SY22-5/

Name	Abstract	Name	Abstract	Name	Abstract
	YIA-34	Hahm, Eun-Ryeong	<b>PC1410</b>	Hashimoto, Koshi	SY20-4
Ganeko, Natsuki	PC0202	Hahm, Ki Baik	<b>SY29-2</b>	Hashimoto, Kotaro	<b>PB0717</b>
Gao, Ge	PC0702	Hahn, Dong-yup	PC1319		PC0611
Gao, Guanzhen	PA0310	Ham, Tae Hun	SY13-4	Hashimoto, Naoto	<b>PB0206</b>
	PA0711/	Ham, Taehun	<b>PC0404/</b>		PC1302
	FT1-11		<b>YIA-17</b>	Hashimoto, Natsuki	SY21-5/
	<b>PA0815</b>	Hamada, Aya	SY30-4		YIA-16
	PC1912		PB0607/	Hashimoto, Seiya	PA0219
	PD0105		FT1-01	Hashimoto, Takao	PB0717
Gao, Qiuli	PB0725	Hamada-Sato, Naoko	PA0104	Hashimoto, Yuki	PB0716
Gao, Ruichang	PB0616	Hamajima, Hiroshi	<b>PC0107</b>	Hata, Keishi	PA0402
Gao, Xiaolu	PC1704	Han, Huan	PA0711/		PD0302
Garcia-Villalba, Rocío	SY13-1		FT1-11		<b>PD0704</b>
Garnique, Anali D.M.B.	SY44-4	Han, Le	PB0107		PD0901
Ge, Yueting	PC0612		PC0612		PD0903
Gerardi, Gisela	PB0702	Han, Nam S.	SY04-4	Hatazawa, Yukino	SY27-5/
Gill, Chris	PSY-2	Han, Nam Soo	PD0101		YIA-24
Glezer, Isaias	SY27-1	Han, Xingman	PB0207		PC1007/
Goi, Wakana	SY44-3	Hanada, Ryuzo	PC0611		YIA-26
Goncalves, Idalina	PD0729	Hanamura, Asami	PC0203		PC1010/
Gonzalez-Fernandez R, de la Rosa L.A.	SY03-6	Hanayama, Yuka	SY38-4		YIA-27
Gonzalez-SanJose, M. Luisa	PA0812	Handa, Osamu	<b>LS17</b>		PC1013
	PB0702	Handoko, Dody Dwi	PD0708/	Hattori, Hidemi	PA0809
	SY13-1		FT2-03	Hattori, Koji	<b>PC0101</b>
Gooneratne, Jaanaki	PA0804	Hao, Wangjun	<b>PC0807</b>	Hattori, Takanari	PD0103
Goshima, Naoki	PC1404	Hapsari, Martina Widhi	PA0502	Hayakawa, Sumio	PD0301/
Goto, Masao	PC1302	Hara, Hiroyuki	PB0901/		YIA-37
Goto, Masashi	PC0504		FT3-02	Hayashi, Daiki	SY15-4
	PC1333	Hara, Ryotaro	SY35-3	Hayashi, Hidenori	PB0804
Goto, Megumi	PC1101	Hara, Taichi	<b>SY33-5</b>	Hayashi, Nao	<b>PB0402</b>
Goto, Motonobu	PD0705		PC0301	Hayashi, Takuya	PC1214
Goto, Tsuyoshi	<b>SY57-2</b>		PC0302	Hayashi, Yuki	PC1905
	PB0413	Harada, Etsuko	PB0502	Hazu, Yuka	<b>PD0201</b>
	PC0501	Harada, Etsumori	SY34-3	He, Chaoqi	<b>SY54-6/</b>
	PC1305/	Harada, Hiroyasu	<b>PB1005</b>		<b>YIA-02</b>
	YIA-32	Harada, Naoki	<b>PA0605</b>	He, Xi	PC1329
	PC1326		PB0211	He, Zouyan	<b>PC0801</b>
Gotoh, Naohiro	SY09-2		PC1002/	Hendry, Amy	PB0101
Gotoh, Saki	<b>PC1203</b>		YIA-28	Heo, Ho Jin	SY09-4
Gotoh, Yayoi	SY55-4		PC1014	Hermiani, Ainia	<b>PC0505/</b>
Granvogl, Michael	<b>SY49-3</b>		PC1327		<b>FT3-14</b>
Greenspan, Phillip	SY36-3		PC1404	Heru, G. Permata	PA0311/
Gu, Huaiyu	PL7	Harimurti, Yohases	PA0810		FT2-01
Guillen Quispe, Yanymee Nimesia	SY14-4	Harmayani, Eni	<b>SY51-4</b>	Hesti, Indra Sofiana	PA0103
Gunawan Puteri, Maria D.P.T.	PA0207		PD0726/	Hibi, Kento	<b>PB1010</b>
	PD0610		YIA-39	Hida, Ryoko	PA0213
	PB0103	Haryono, Haryono	PA0810	Hidaka, Kaede	PC1311
Guo, Haitao	PL7	Hase, Ayumu	PB0902/	Hidaka, Kenta	PC1311
Guo, Jingke	<b>SY08-5</b>		FT2-14	Hiemori-Kondo, Miki	<b>PB0711</b>
Guthrie, Najla	<b>PC1602/</b>	Hase, Koji	<b>SY48-2</b>	Higaki, Ryoga	SY29-3
Guttman, Yelena	<b>FT2-06</b>	Hasegawa, Seiji	PC0101	Higashi, Akane	PB0604
			PC0601	Higashimura, Yasuki	<b>PC0208</b>
		Hashidume, Tsutomu	PB0403	Higashisaka, Kazuma	SY06-1
			PD0301/	Hilda	PA0702
Hagio, Taisei	<b>PB0902/</b>		YIA-37	Hilman, Adrian	<b>PD0726/</b>
	<b>FT2-14</b>		<b>SY53-4</b>		<b>YIA-39</b>
Hagiwara, Kanata	PB0804	Hashimoto, Koichi	PB0410	Himoto, Fumika	PA0204



Name	Abstract	Name	Abstract	Name	Abstract
Hino, Shinjiro	<b>SY20-5</b>	Honda, Akira	PC1206		<b>PC0703/</b>
Hioki, Fuyuko	PD0104	Honda, Chihiro	PA0105		<b>FT1-06</b>
Hiraga, Yumika	PC1303		<b>PA0106</b>	Hsu, Chen	<b>PB0731</b>
Hirai, Shizuka	<b>SY20-2</b>	Honda, Hiroyuki	PD0707		<b>PB0732</b>
	PA0307	Honda, Katsunari	PC1016	Hsu, Chia-Yun	PC1904
	PA0309	Honda, Mizuki	PB0804		<b>PD0502</b>
	PC1306		PD0202		PD0702/
	PC1318	Hong, Il-Hwa	PC1202		FT3-09
Hirakawa, Satoshi	LS14-1	Horie, Noriko	LS05-3		PD0712/
	<b>LS14-2</b>	Horigome, Satoru	<b>PA0303</b>		YIA-40
	PC1801	Horiki, Yusuke	<b>PD0501</b>	Hsu, Chin-Lin	<b>PC1304</b>
Hiraki, Shinobu	PC0203	Horiuchi, Hiroko	PA0605	Hsu, Fu-Lan	PC1332
Hiramatsu, Naoko	PB0412		PC1404	Hsu, Hsiu-Han	PB0814
Hirano, Akane	PD0701	Hosaka, Masaru	PA0105	Hsu, Jih-Ning	PD0110
Hirano, Marina	<b>PA0707</b>	Hoshino, Munehiro	PD0705	Hsu, Jui-Hsia	PC1911
Hirashima, Nayuta	SY21-5/	Hoshino, Yuriko	<b>PD0705</b>	Hsu, Kuo-Chiang	<b>PB0606</b>
Hirata, Takashi	YIA-16	Hosoe, Tomoo	PC1807	Hu, Bochun	PA0114
	PC0802	Hosokawa, Masashi	PA0504/	Hu, Charles(Chun)	<b>PD0718/</b>
Hirata, Tetsuya	PA0408		FT3-01		<b>FT2-02</b>
Hirayama, Akiyoshi	SY41-3		PC1705	Hu, Hanze	SY33-2
Hironao, Ken-yu	<b>PC0904</b>	Hosomi, Ryota	PB0722	Hu, Ming	<b>SY04-1</b>
	PA0406	Hosono, Takashi	<b>SY14-2</b>	Hu, Qing Qiang	PC0404/
	PC1406		SY37-5/		YIA-17
	PC1007/		YIA-29		PC0805
	YIA-26		PB0104/	Hu, Shu-Hui	<b>PB1103</b>
Hirota, Yoshihisa	SY32-1/		YIA-05		PD0713
	YIA-14		PB0810/	Hu, Yujia	PC1704
	PB1007		YIA-11	Huang, Bu-Miin	<b>PA0814</b>
	PB1011		PC0205	Huang, Chia-Wen	<b>PC1907</b>
	<b>PB1012</b>		PC0607/	Huang, Guangwei	PL2
	PB1013		FT3-11	Huang, Kun-Tai	PC1324
	PB1014		PC1212/	Huang, Liping	SY53-5
	PC0719		FT3-10	Huang, Pang-Yuang	PD0502
Hiura, Tsukiho	<b>PB0804</b>	Hosoo, Shingo	PC0802	Huang, Shih-Chien	<b>PC1337</b>
Hiwatashi, Kazuyuki	PD0302	Hou, Chen	PB0701	Huang, Shujiao	PC0904
Ho, Chi-Tang	<b>SY02-3</b>	Hou, Chih-Yao	PA0102/	Huang, Shurong	SY53-5
	PA0710		FT2-09	Huang, Shu-Wei	SY04-5/
	PC0209	Hou, De-Xing	<b>SY22-3</b>		YIA-18
	PC0613		SY33-3		PC0402/
	PC0717		PB0808		YIA-10
	PC0718		PC0301	Huang, Sui-Qing	PA0201
	PC1307		PC1329	Huang, Tao	<b>SY40-1</b>
	PC1308/		PC1407	Huang, Yi-Hsuan	<b>PC0722</b>
	FT3-12		PD0907	Huang, Yu-Chun	PD0719
	PC1309/	Hou, Yang	PB0615	Huang, Yun Ju	SY14-3
	FT3-13	Hsiao, Pei-Wen	PC1337	Huang, Yu-Wen	PA0102/
	PC1324	Hsieh, Meng-Tian	PC1904		FT2-09
	PC1328		PD0502	Huang, Yu-Yun	PD0304/
	PC1332	Hsieh, Meng-Tien	PD0702/		FT3-08
	PA0303		FT3-09	Huang, Zhenghua	PA0107
Ho, Hsin-Jung	PC0712		<b>PD0712/</b>	Hunaefi, Dase	PA0709
Ho, Pin-Yu	<b>PA0710</b>		<b>YIA-40</b>	Huynh, Tim	SY33-2
Ho, Yuan Soon	<b>PSY-3</b>	Hsieh, Shu-Chen	<b>PA0817</b>	Hwang, Daniel	<b>SY53-5</b>
Hodgson, Jonathan M.	SY06-4	Hsieh, Shu-Ling	PA0102/	Hwang, Eun-Sang	PC0809
	PB1107		FT2-09	Hwang, Jae-Kwan	PC1001
	LS05-2				PC1008
Hojo, Hironori	PA0106				PC1009
Hokasa, Masaru					

Name	Abstract	Name	Abstract	Name	Abstract
	PC1802	Inaba, Chikako	PB0736	Ishizuka, Satoshi	PB0802
Hyodo, Kino	PC0203	Inaba, Yuka	LS03	Ismail, Amin	<b>SY36-1</b>
Hyodo, Takuma	<b>PB1105/</b> <b>YIA-15</b>	Inague, Alex	SY27-1	Isoda, Hiroko	PB0410
	PC1323/		<b>PD0106/</b> <b>YIA-36</b>	Isogai, Atsuko	<b>SY43-2</b>
	YIA-33	Ino, Aya	PA0218	Itami, Satoshi	LS05-3
Hyun, Yeji	PC1201	Ino, Kanami	PC0905	Itaya, Mayuko	<b>PB0707</b>
		Inoue, Hirofumi	<b>SY26-3</b>	Ito, Hideyuki	PC0111
<b>I</b>			PB0413	Ito, Junya	PC0202
Ichikawa, Hiroshi	<b>SY29-3</b>		PC0501	Ito, Keisuke	PC1803
	SY29-4		PC1326	Ito, Kenichi	PB0403
Ichikawa, Saki	<b>PC1809</b>	Inoue, Hiroyasu	PC1401	Ito, Mikiko	PC1203
Ichinose, Takashi	<b>PC0603</b>	Inoue, Hitoshi	PC1326	Ito, Takashi	PB0503
Ide, Ryoko	PC1601	Inoue, Kazuo	<b>LS03</b>	Ito, Toshihiro	<b>SY07-3</b>
Igarashi, Kiharu	PA0202		PB0617	Ito, Yoshiaki	PB1108
Igarashi, Miki	<b>SY05-3</b>		PC1305/		SY55-3
	PD0301/	Inoue, Masako	YIA-32	Ito, Yuki	PC1330
	YIA-37		PB0203		SY32-1/
Igarashi, Ryota	<b>PC1209</b>		<b>PC1902/</b> <b>YIA-35</b>	Itoh, Chihiro	YIA-14
Igase, Keiji	SY45-2	Inoue, Mayuri	PD0613	Itoh, Hiroshi	PB0604
Igase, Michiya	<b>SY45-2</b>	Inoue, Miho	PA0203	Itoh, Mitsuko	LS04-2
Iguchi, Takafumi	PA0109	Inoue, Naoki	PA0203	Itoh, Nobuyuki	<b>SY01-1</b>
Iida, Kaoruko	PB0703		SY45-2		PB0104/
Iizumi, Yosuke	<b>SY44-3</b>	Inoue, Ryo	PC0503	Itoh, Yusuke	YIA-05
Ikarashi, Nobutomo	PA0215		SY17-4	Iwai, Kazuya	PC0501
	<b>PC1807</b>	Inoue, Takashi	PB0812	Iwai, Ken-ichi	<b>SY43-4</b>
Ikeda, Ayana	SY37-5/	Inoue, Takuro	PC1206	Iwai, Takao	SY10-3
	YIA-29	Inui, Hiroshi	PC1003	Iwakura, Hiroshi	<b>PA0705</b>
Ikeda, Chiaki	<b>PB0301</b>		SY57-4	Iwamoto, Akira	PB0617
Ikeda, Reiko	<b>PC1502</b>		PA0605	Iwasaki, Yu	PC0107
	<b>PC1908</b>	Inui, Takashi	PC1404		SY30-3
Ikeda, Shiori	PC1212/	Ippoushi, Katsunari	PC1404	Iwase, Mari	PD0102
	FT3-10	Irie, Junichiro	PB0206		<b>PC1305/</b> <b>YIA-32</b>
Ikemoto, Hiroyuki	PB0617	Ishibashi, Ken-ichi	<b>LS04-2</b>	Iwashima, Tomomi	PB0718
Ikewaki, Katsunori	PC0803/	Ishibashi, Takaaki	SY38-4	Iwashita, Sakura	PC0613
	FT3-06	Ishida, Yoshiyuki	<b>LS12</b>	Izumi, Hirohisa	<b>SY37-2</b>
Ikushiro, Shinichi	SY04-2	Ishihama, Yasushi	PC0705		
	PB1009	Ishii, Ayaka	<b>SY25-1</b>	<b>J</b>	
	PB1010		PC1306	Jamil, Muhammad Usman	PC1914
	PB1017	Ishii, Takeshi	PC1318	Jang, Chan Ho	PB0738
	PC0406/	Ishikawa, Chiaki	PC1604	Jang, Davin	SY04-4
	YIA-20		<b>PA0401</b>		<b>PD0101</b>
	PC0408	Ishikawa, Eimi	PA0601	Jang, Keum-Il	<b>PD0605</b>
	<b>PC0409</b>		PC0607/		PD0607
	PC1905	Ishikawa, Hirohito	FT3-11		PD0608
	PD0908	Ishikawa, Hiroya	<b>SY47-4</b>	Jao, Chia-Ling	PB0606
Im, Sin-Hyeog	<b>SY17-1</b>	Ishikawa, Takahiro	PB0736	Jaturasitta, Sanchai	SY30-5
Imai, Kento	<b>PD0707</b>	Ishikawa, Yuichi	PC1014	Jedraszcyk, Elzbieta	SY36-5
Imai, Masanao	PA0805	Ishikawa-Takano, Yuko	PC0407	Jeong, Do-Youn	PA0816
	PD0501	Ishimaru, Yoshiro	PA0216	Jeong, Su-Ji	PA0816
	PB0211	Ishisaka, Akari	SY43-3	Jheng, Hwei-Fen	SY57-2
Imai, Momoko	PC1303		PC0708		PC1305/
Imai, Takeshi	PA0109	Ishisono, Keita	PC1322		YIA-32
Imaizumi, Atsushi	PB0707	Ishitani, Midori	SY38-2	Jhou, Bo-Yi	<b>PC1911</b>
Ina, Shigenobu	SY30-4	Ishizaki, Mayu	PB0503	Jhuang, Jhao-Rong	PD0604
	PB0607/	Ishizuka, Keiko	PC0309	Ji, Dawei	PB0611/
	FT1-01		PA0402		FT1-02

Name	Abstract	Name	Abstract	Name	Abstract
Jia, Huijuan	<b>PC1503</b>		<b>PC0804</b>		YIA-40
Jia, Xiao	PB0411	Kajiya, Takashi	PC0804	Kapoor, Mahendra P.	<b>SY02-5</b>
Jiang, Bo	<b>SY02-2</b>	Kakiuchi, Misako	SY43-4	Kapusniak, Janusz	<b>SY48-5</b>
Jiang, Mengxi	PA0107	Kakizaki, Ikuko	PC0504	Kapusniak, Kamila	SY48-5
Jiang, Xin	PB0302		PC1333		<b>PD0729</b>
Jiang, Yike	PC0209	Kakoi, Shogo	PC0108	Karaki, Shin-Ichiro	PC1905
Jiang, Yuge	PB0107	Kakuni, Masakazu	<b>PD0901</b>	Kariya, Taishi	PB0717
	PB0725		PD0903	Kasahara, Kengo	SY38-4
	PC0612	Kalt, Wilhelmina	<b>SY21-3</b>	Kasai, Hiroshi	PD0714
Jiang, Zhe	<b>PC1214</b>	Kalyanam, Nagabhushanam	PC0718	Kashima, Kentaro	PC1214
Jiang, Zi-Tao	PA0302	Kamao, Maya	SY32-1/ YIA-14	Kashima, Takahiro	<b>PA0404</b>
	PD0108		PB1007	Kasuno, Toko	PB0604
Jimenez-Hernandez, FE	SY03-6		PB1011	Katahira, Risako	PB0909
Jimi, Shiro	PB0613		PB1012	Katakura, Yoshinori	SY23-3
Jin, Wen-Gang	<b>PB0616</b>		PB1013	Katano, Hajime	PB0501
Jin, Xuepu	PC1704		PB1014	Kataoka, Yasufumi	PB0612/ YIA-07
Jin, Yongyang	PC1912		PB1015	Kataoka-Matsushita, Aya	PC0502
Jintanaporn, Wattanathon	PA0210		PC0719	Katayama, Hidekazu	SY08-3
Jintanaporn, Wattanathorn	PA0305		<b>SY26-1</b>	Katayama, Naoki	PA0307
Jobin, Christian	SY15-5	Kambe, Taiho	PB0501	Katayama, Shigeru	<b>PB03-2</b>
Jongjareonrak, Akkasit	PC0711/ FT1-05	Kamei, Asuka	PD0202		PB0741
Joubert, Elizabeth	<b>PB0724</b>	Kamei, Junzo	PA0215		PC0615
	PB0729		PC1807		PC1409
	PC0207	Kamei, Yasutomi	<b>SY20-1</b>		PC1809
Julianti, Elisa	<b>PB0728/ FT2-04</b>		SY27-5/ YIA-24	Katayama, Takane	<b>SY17-3</b>
Jung, Eun-Soo	LS08-2		PC1007/ YIA-26	Kato, Eisuke	PA0207
Jung, Heeja	LS08-3		PC1010/ YIA-27	Kato, Hisanori	PC1314
Jung, Su-Jin	PD0402		PC1011		<b>PL5</b>
	LS08-1		PC1012/ YIA-25	Kato, Kazuko	<b>SY40-4</b>
	LS08-2		PC1013	Kato, Mai	PC1503
	LS08-3		PB0713		<b>SY23-2</b>
Jung, Ui-Hwan	PD0605	Kamitani, Tomohiko	SY19-2		PB1106
	PD0607	Kamohara, Seika	PB0407		<b>PD0301/ YIA-37</b>
	<b>PD0608</b>	Kanamori, Yuta	<b>SY28-1</b>	Kato, Yoji	SY17-6/ YIA-30
Jung, Young S.	SY04-4	Kanashiro, Larissa Naomi	SY19-2		<b>SY44-2</b>
		Kanaya, Shigehiko	PB0407		PB1106
<b>K</b>		Kanayama, Yoshiki	<b>SY50-2</b>		PC0203
Kadar, Adinda D.	<b>SY10-4/ YIA-01</b>		SY31-4		PC0504
	SY28-3	Kanazawa, Ko	<b>PC0106</b>		PC1333
Kadota, Kazunori	SY28-3	Kanazawa, Koji	<b>PA0204</b>	Katsube, Aiko	PD0404
Kageyama, Masakatsu	<b>PA0801</b>		<b>PD0112/ FT1-09</b>	Katsumata, Shi-Ichi	SY26-3
Kagohashi, Yukiko	PC1502	Kaneda, Keitaro	PB0501	Katsumata-Tsuboi, Rie	SY26-3
	PC1908	Kaneko, Ichiro	SY04-3		PB0413
	<b>PD0404</b>	Kaneko, Miho	PC1807		PC0501
Kai, Kenji	PB0908/ YIA-12	Kang, Haneul	<b>PC1802</b>	Katsuta, Nana	SY27-3
	PC1002/ YIA-28	Kang, Hyejin	<b>PB1102</b>	Katsuta, Ryo	PA0105
	PC1601	Kanno, Kenich	PA0203		PA0106
	PA0308	Kanno, Takashi	SY38-4	Kaul, Ashish	PC0705
Kaimuangpak, Karnchanok	PA0308	Kanno, Tomomi	<b>PB0502</b>	Kaul, Sunil	<b>PC0704</b>
Kaiya, Hiroyuki	<b>SY08-3</b>	Kanzaki, Hirokatsu	PB0721/ YIA-09		PC0705
Kajiya, Katsuko	SY08-4		PA0818	Kawabata, Kyuichi	<b>SY49-4</b>
	PB0405	Kao, Tsai-Hua	PD0712/ YIA-09	Kawabeta, Koji	SY18-3
		Kao, Yu-Wen		Kawada, Teruo	SY57-2
					SY57-3

Name	Abstract	Name	Abstract	Name	Abstract
	PB0413	Kihara, Shinji	<b>SY16-3</b>	Kim, Young-Min	PB1102
	PC0501	Kikuchi, Masahiro	<b>PC1903</b>		PC0102
	PC1305/ YIA-32		PC1906	Kim, Young-Wan	PB0201
	PC1326	Kikuchi, Mayu	PB0413	Kim, Yuri	PC1501
Kawaguchi, Mikiko	SY02-5		<b>PC0501</b>	Kimira, Yoshifumi	PC0502
Kawahara, Shiori	PC0803/ FT3-06	Kikuzaki, Hiroe	PC1326		<b>PC0503</b>
	PD0714	Kim, Byoung-Kook	PA0304	Kimura, Ikuo	<b>SY35-2</b>
Kawai, Kazuaki	PB1106	Kim, Changhee	PC1201		<b>LS04-1</b>
Kawai, Masaki	<b>PC0203</b>		PC1001		PC0501
	SY33-6	Kim, Dae-Ok	PC1008	Kimura, Ken-ichi	PC1330
	PB1101		<b>PC1009</b>	Kimura, Naohiro	PC1014
Kawakami, Hirosato	PC1335		SY04-4	Kimura, Toshiyuki	<b>PC0401</b>
Kawakami, Yuki	PC0201		SY09-4	Kinoshita, Keigo	SY06-1
	PC0202	Kim, Daeun	PC0809	Kinoshita, Mikio	LS14-1
Kawamoto, Seiji	<b>SY31-2</b>	Kim, Do-Hee	PD0101	Kishi, Hiroko	SY08-4
Kawamura, Hiromi	PB0503	Kim, Dong-Hyeon	<b>PC1501</b>	Kishi, Yui	<b>PB1106</b>
Kawamura, Mafumi	PC0715	Kim, Dong-Shin	SY14-4	Kishimoto, Noriaki	PC1903
Kawamura, Takuya	PA0106	Kim, Gun-Hee	SY49-1	Kishimoto, Saya	SY39-2
Kawano, Kuniaki	SY10-3	Kim, Hong-Sik	<b>PB0730</b>	Kishimoto, Sumire	<b>PC1312</b>
Kawasaki, Ai	PC1807	Kim, Hyunsook	SY09-4	Kishimoto, Yoshimi	SY08-2
Kawasaki, Takashi	PA0219	Kim, In-Hae	SY04-4		PB0703
Kawasaki, Yuya	PD0714		SY49-1		<b>PB0718</b>
Kawasoe, Haruna	<b>PB0405</b>	Kim, Jeong Un	SY31-4	Kishino, Shigenobu	<b>SY05-4</b>
	PC0804	Kim, Ji Yeon	PC0106		SY35-3
Kawasoe, Kanami	PC1318	Kim, Ji-Hee	PC1202		PC0501
Kawatani, Ririko	SY29-4	Kim, Ji-Hye	<b>PC1201</b>	Kita, Masahiro	PC0610/ YIA-21
Kawate, Keigo	PB0104/ YIA-05	Kim, Jin-Sol	PC1201	Kitabatake, Masahiro	PB1108
	PSY-3	Kim, Jong Hoon	PC1405	Kitada, Yuya	<b>PC1212/ FT3-10</b>
Kay, Colin	PB1108	Kim, Jong-Sang	PD0608		
Kayano, Shin-ichi	<b>SY27-2</b>	Kim, Ji-Hye	PD0101	Kitaguchi, Kohji	<b>SY38-2</b>
Kazumura, Kimiko	SY47-4	Kim, Kwang Pyo	<b>PB0738</b>		PA0214
	PA0310	Kim, Kyeong Jin	<b>PC0809</b>	Kitakaze, Tomoya	PC1203
Ke, Lijing	<b>PA0711/ FT1-11</b>	Kim, Kyeong Soo	PC1201		PB0204
	PA0815	Kim, Min-Gyun	PD0603		<b>PB0907/ YIA-13</b>
	PC1912	Kim, Min-Jeong	PA0505		PC0902/ YIA-23
	<b>PD0105</b>	Kim, Mi-Seon	PA0506		PC1002/ YIA-28
Keawyok, Kridsada	<b>PB0807</b>		PC0809		PC1014
Keiji, Dempo	PA0501	Kim, Mujo	<b>SY04-4</b>		PC1315
Kencana W., Triyati D.	PA0311/ FT2-01		PD0101		<b>PC1806</b>
	PC1602/ FT2-06	Kim, Mujoyo	SY23-3		PC1902/ YIA-35
Kerem, Zohar	PC1602/ FT2-06	Kim, Oksoo	LS05-2	Kitami, Manamu	PC0406/ YIA-20
	PA0706	Kim, Seong Hoon	LS05-3		PA0304
	PB0709	Kim, Sue	LS05-1	Kitamura, Yurika	SY55-2
	PB0719	Kim, Su-Hyeong	PA0701	Kitaura, Yasuyuki	LS05-1
	<b>PC1910</b>	Kim, Taehyung	PD0402	Kitaura, Yoshiaki	PC0706
	<b>PC1803</b>		<b>SY14-4</b>	Kitichaiworakul, Romteera	<b>PC0710</b>
Khalifa, Saoussane	<b>SY42-3</b>	Kim, Yerin	PD0402	Kitichaiworakul, Romteera	PD0302
Khanongnuch, Chartchai	PA0209	Kim, Yookyung	PC1410		PA0213
Khatib, Mohamad	PB0720/ FT2-05	Kim, You-Il	PC1202	Kiuchi, Takanobu	
Khuanphram, Napaporn	<b>PC0707</b>	Kim, Young Min	PD0602	Kiura, Katsuyuki	<b>PB0612/ YIA-07</b>
	SY08-3	Kim, Young-Kyoung	<b>PC0603</b>	Kiyohara, Hayato	<b>PB0303/ YIA-07</b>
Kihara, Minoru			PD0605	Kizawa, Yuki	

Name	Abstract	Name	Abstract	Name	Abstract
Ko, Ju-Young	<b>YIA-22</b> PA0505 <b>PA0506</b> <b>PB0603</b>	Kondo, Yukiko Kong, Ah-Ng Tony Kong, Zwe-Ling	PC1338 <b>SY22-1</b> PB0726 <b>PB0711</b>	Kumazawa, Shigenori  Kumazoe, Motofumi	PC1323/ YIA-33 <b>SY22-2</b> PB0721/ YIA-09 PC1408 PC1503 PB0105/ YIA-04
Ko, Sunkyung Koba, Kazunori Kobara, Hisanori Kobashi, Riyo	<b>PB0201</b> <b>SY18-3</b> PC0111 SY28-3	Kongtawelert, Prachya Konishi, Masaaki Konishi, Morichika	PC0707 PB0803 PB0104/ YIA-05 <b>PC0901</b>	Kume, Shoen Kumrungsee, Thanachaporn	PC1503 PB0105/ YIA-04 PB0717
Kobayashi, Hayato	<b>PB0608/</b> <b>FT1-12</b>	Konishi, Tatsuya Konno, Masaki	PC1016 <b>PC0713</b>	Kumrungsee, Thanutchaporn Kung, Ming-Ya	PB1018 <b>SY17-2</b>
Kobayashi, Hiroshi Kobayashi, Hisamine Kobayashi, Isao Kobayashi, Izumi Kobayashi, Keiko Kobayashi, Masaharu Kobayashi, Masakazu Kobayashi, Masumi Kobayashi, Naoyuki Kobayashi, Rie Kobayashi, Sei Kobayashi, Shunjiro Kobayashi, Yasuyuki	PB0736 <b>SY07-2</b> PD0905 PA0105 SY29-4 <b>PB1007</b> PC1336 PA0405 PC1003 PB0708 <b>SY08-4</b> PB1015 <b>PC1002/</b> <b>YIA-28</b> <b>SY53-1</b> SY53-2 <b>PA0219</b> PC1335 <b>SY50-3</b> <b>SY07-1</b> <b>SY56-2</b> PB0104/ YIA-05 PC0103 PC0104	Kono, Kakeru Kono, Ryohei Konoike, Yuka  Kopec, Annetta Kosaka, Hideki Kosaka, Hiroki  Kosakai, Toshiaki Koseki, Kyohei  Kotani, Mayuko Koterawsawa, Katsuaki Koyama, Masahiro Koyama, Yoh-ichi  Koyano, Takayuki Kruger, Marlana C. Kuan, Ching-Yi Kubo, Harumi Kubo, Hisao Kubota, Hiroki Kudo, Michiko Kudo, Yui Kueanjinda, Patipark	PA0407 PC0201 PC0202 SY36-5 SY55-4 <b>PB0104/</b> <b>YIA-05</b> <b>SY10-3</b> PB1005 <b>PC0806</b> PB0604 PD0107 PA0218 PC0109 PC1805 PB0717 <b>SY46-3</b> PC0810 PD0103 PA0213 PD0104 PC1327 PC1330 PB0741 PC1809 <b>PD0907</b> SY30-4 PB0607/ FT1-01 PB0608/ FT1-12 PB0901/ FT3-02 PB0902/ FT2-14 PB0903/ FT3-03 PC0803/ FT3-06 SY30-4 PB0607/ FT1-01 PB0412 SY45-3	Kunisawa, Jun Kuo, Chia-Wen Kuo, Hsin-Ying  Kurabayashi, Atsushi Kurashina, Akie Kuriyama, Koji Kurniasih, Retno Ayu  Kurogi, Katsuhisa  Kurosawa, Aya Kurotani, Kayo Kusu, Hikari Kusubata, Masashi  Kusudo, Tatsuya  Kusumi, Asako Kuswardani, Indah Kuswardhani, Nita  Kuwaba, Kumiko  Kuwabara, Akiko  Kuwata, Hidefumi Kwak, Eunji Kwak, Jun-Gu Kwek, Erika Kweon, Mi-Na Kwon, Dae Young Kwon, Dowan Kyoda, Takuya Kyogoku, Nami	PC0703/ FT1-06 PB0617 PB1303 <b>PD0302</b> PD0715/ FT2-08 <b>SY25-5</b> PA0809 PB0715 PC1214 PC1327 PC0109 PC1805 PC1305/ YIA-32 <b>PC0611</b> PA0810 PD0709/ FT2-07 <b>PC0109</b> <b>PC1805</b> PB1015 PB1016 SY34-3 <b>PD0602</b> PD0101 <b>PC0808</b> <b>SY31-1</b> <b>SY42-4</b> PC1009 SY34-3 PB0708
Kobori, Masuko  Kobori, Ryo Kodama, Takayuki Koeduka, Takao Koh, Ara Kohno, Mitsutaka Kohno, Yuki  Koide, Tsuyoshi  Koido, Masaaki Koizumi, Ryo Koizumi, Ryoko Koizumi, Seiko Kojima, Hiroitada Kojima, Kenji Kojima, Yusuke Komabayashi, Genki  Komai, Michio Komaru, Takumi  Komeda, Seiji Komine, Shoichi Kon, Risako  Kondo, Kazuo  Kondo, Saki Kondo, Taishi	<b>YIA-28</b> <b>SY53-1</b> SY53-2 <b>PA0219</b> PC1335 <b>SY50-3</b> <b>SY07-1</b> <b>SY56-2</b> PB0104/ YIA-05 PC0103 PC0104 SY02-5 PC0805 PC1318 SY45-2 <b>PD0909</b> <b>PA0402</b> <b>PA0105</b> PB0612/ YIA-07 PA0303 PB0105/ YIA-04 PC0719 PC1015 <b>PA0215</b> PC1807 SY08-2 PB0703 PB0718 PC1905 PB0704	Kugimaru, Tomoki Kumagai, Hitoshi  Kumagai, Hitoshi  Kumamoto, Shun Kumar, J. Suresh	PC1338 <b>SY22-1</b> PB0726 <b>PB0711</b> PC0707 PB0803 PB0104/ YIA-05 <b>PC0901</b> PC1016 <b>PC0713</b> PA0407 PC0201 PC0202 SY36-5 SY55-4 <b>PB0104/</b> <b>YIA-05</b> <b>SY10-3</b> PB1005 <b>PC0806</b> PB0604 PD0107 PA0218 PC0109 PC1805 PB0717 <b>SY46-3</b> PC0810 PD0103 PA0213 PD0104 PC1327 PC1330 PB0741 PC1809 <b>PD0907</b> SY30-4 PB0607/ FT1-01 PB0608/ FT1-12 PB0901/ FT3-02 PB0902/ FT2-14 PB0903/ FT3-03 PC0803/ FT3-06 SY30-4 PB0607/ FT1-01 PB0412 SY45-3	Kumazawa, Shigenori  Kumazoe, Motofumi  Kume, Shoen Kumrungsee, Thanachaporn  Kurabayashi, Atsushi Kurashina, Akie Kuriyama, Koji Kurniasih, Retno Ayu  Kurogi, Katsuhisa  Kurosawa, Aya Kurotani, Kayo Kusu, Hikari Kusubata, Masashi  Kusudo, Tatsuya  Kusumi, Asako Kuswardani, Indah Kuswardhani, Nita  Kuwaba, Kumiko  Kuwabara, Akiko  Kuwata, Hidefumi Kwak, Eunji Kwak, Jun-Gu Kwek, Erika Kweon, Mi-Na Kwon, Dae Young Kwon, Dowan Kyoda, Takuya Kyogoku, Nami	PC1323/ YIA-33 <b>SY22-2</b> PB0721/ YIA-09 PC1408 PC1503 PB0105/ YIA-04 PB0717 PB1018 <b>SY17-2</b> SY12-4 PC0703/ FT1-06 PB0617 PB1303 <b>PD0302</b> PD0715/ FT2-08 <b>SY25-5</b> PA0809 PB0715 PC1214 PC1327 PC0109 PC1805 PC1305/ YIA-32 <b>PC0611</b> PA0810 PD0709/ FT2-07 <b>PC0109</b> <b>PC1805</b> PB1015 PB1016 SY34-3 <b>PD0602</b> PD0101 <b>PC0808</b> <b>SY31-1</b> <b>SY42-4</b> PC1009 SY34-3 PB0708
<b>L</b>					
				Laan, Lisa C. Labriola, Leticia  Lai, Ching-Shu	SY38-3 PD0106/ YIA-36 <b>PC1307</b> <b>PC1308/</b> <b>FT3-12</b> PC1309/ FT3-13

Name	Abstract	Name	Abstract	Name	Abstract
Lai, Hsi-Mei	<b>PD0611</b>	Li, Jia-Huei	PC0703/	Lin, Fang-Yu	PC0614
Lai, Ying-Jiun	PD0711		FT1-06	Lin, Fuxing	PA0107
Lailerd, Narissara	PA0509	Li, Jian	PD0802	Lin, Jia-Rong	PB0610
	PB0417	Li, Jianfang	SY31-3	Lin, Jingjing	PA0815
	PB0418		<b>PA0114</b>	Lin, Jing-Ru	PC1307
Lambert, Joshua D.	<b>SY16-1</b>	Li, Jianke	<b>PB0701</b>	Lin, Ping-Ting	PD0304/
Lampe, Johanna W.	<b>SY56-1</b>	Li, Jiao	PD0706		FT3-08
Lan, Chieh-Yu	SY12-4	Li, Jinrong	PA0108/	Lin, Shih-Bin	PD0604
Langella, P.	<b>SY48-4</b>		FT1-13	Lin, Shiman	PC0612
Lawan, Siriporn	PA0208	Li, Kun-Lin	PD0703	Lin, Shu-mei	PB0723
Lay, Bibiana Widiyati	SY11-5	Li, Li-peng	PD0618/	Lin, Tong	SY05-6
	PC1310		FT3-15	Lin, Tung-Yu	PA0507
Le, Guowei	<b>PB0103</b>	Li, Na	SY10-1	Lin, Wei-Sheng	<b>PC0701</b>
	<b>PB0107</b>	Li, Rong	<b>PA0302</b>	Lin, Wen Hung	PD0906
	<b>PB0725</b>		PD0108	Lin, Yan-Cheng	PA0704
	<b>PC0612</b>	Li, Shang-Wei	PA0703	Lin, Yi-Jou	PA0201
Lee, Gil-Ran	PB0706	Li, Shiming	SY02-3	Lin, Yi-Ling	PC1301
Lee, Ha-Nul	PB1102	Li, Xiangfei	PB0813	Lin, Ying-Ling	<b>SY23-5</b>
	<b>PC0102</b>	Li, Xiu-Xin	PB1104	Ling, King Hwa	SY32-2/
Lee, Hea-Young	<b>PA0701</b>	Li, Yanmei	PB0303/		YIA-38
	PD0402		YIA-22	Liu, Chunpeng	SY05-6
Lee, Hyeonwoo	PC0604	Li, Yao	<b>SY35-4</b>	Liu, Hangqi	PC1704
	PC0605	Li, Ying	PB0404	Liu, Haofei	PA0108/
Lee, Jeong-Eun	PC1913	Li, Yun-Shan	<b>PD0714</b>		FT1-13
	PC1914	Liang, Runping	PD0615	Liu, Hongnan	<b>SY26-4</b>
Lee, Ji-Hyeok	PA0505	Liang, Ying	PB0906	Liu, Jen-Fang	PA0201
	PA0506	Liang, Zhi-Rong	PC1328	Liu, Je-Ruei	<b>PB0814</b>
	PB0603	Liao, Han-Wei	<b>PC0614</b>	Liu, Kun	SY18-1
Lee, Jung Eun	PA0701	Liao, Harrison Xian-Qi	PC1332	Liu, Ming	PD0615
	PD0402	Liao, Vivian Hsiu-Chuan	PA0703	Liu, Ming-Yi	PB1103
Lee, Kyungsene	<b>PD0601</b>		PC1332		<b>PD0713</b>
Lee, Mi-Gi	SY09-4	Liaqat, Humna	PC1201	Liu, Mujun	PA0603
Lee, Pei-Sheng	<b>PC0718</b>	Lim, Jae Min	PC1913	Liu, Ping-Jung	PB0606
Lee, Siew Siew	<b>SY32-2/</b>	Lim, Jinkyu	PC1319	Liu, Shing H.	<b>SY55-5</b>
	<b>YIA-38</b>	Lim, Sang-Bin	PB0730	Liu, Shing-Hwa	SY09-1
Lee, So Eui	SY14-4	Lim, See Meng	<b>SY38-6/</b>	Liu, Shutao	PL7
Lee, So-Hyeon	PB1102		<b>YIA-03</b>		<b>PC1704</b>
Lee, Sue Jung	<b>PC0716</b>		<b>PB0205</b>	Liu, Su-Fen	PD0713
	PC1204	Lin, Ching-Pin	PC1337	Liu, Te-Hua	PA0110
Lee, Yu-Tsung	PA0201	Lin, Dai	PA0310	Liu, Wenxian	PA0101
	<b>PB1004</b>	Lin, David Pei-Cheng	SY53-3	Liu, Xiao-Lan	PA0206
Lei, Yen-Ping	PC1337		<b>SA0507</b>	Liu, Xiaoming	PD0612
Lemay, Danielle	SY53-5		PB1002		<b>PD0614</b>
Lengkidworraphiphat, Phatthawin	<b>SY30-5</b>		PC1213/	Liu, Ya-Jing	<b>PC1904</b>
	PC0711/		FT1-15		PD0502
	FT1-05		PC1320/		PD0702/
Lestari, Lily A.	SY51-4		FT3-05		FT3-09
Leung, Lai K.	<b>PB0723</b>		PC1904		PD0712/
Lewis, Joshua R.	PB1107		PC1907		YIA-40
Lheman, Jennifer	PC1310		PD0502	Liu, Yanxiang	PD0615
Li, Bowen	PB0107		PD0702/	Liu, Yaowei	PD0614
	PB0725		FT3-09	Liu, Ye	<b>PD0802</b>
	PC0612		PD0712/	Liu, Yuan-Po	PB0731
Li, Chia-En	<b>PB0726</b>		YIA-40	Liu, Yu-Wen	<b>PC0210</b>
Li, Hui	SY38-6/		PD0902/	Liu, Zun	PB0404
	YIA-03		FT3-07	Liyanage, Anudini	PA0804
	PB0205		PD0906	Lo, Chih Y.	PA0704

Name	Abstract	Name	Abstract	Name	Abstract
Loh, Su Peng	SY32-2/ YIA-38	Manabe, Yuki	<b>SY21-5/ YIA-16</b>	Matsukaze, Narumi	PB0608/ FT1-12
Lois, Kristina	PA0702		PB0301	Matsumoto, Kanako	<b>PB0741</b>
Lopes, Joana	PD0729		PC1801		PC0615
Lou, Shyi-Neng	PD0604		PC1804	Matsumoto, Kanna	PC1205
Loypimai, Patiwit	SY41-4		PD0720	Matsumoto, Keiko	<b>PD0107</b>
Lu, Chun-Ping	PA0301	Mann, Jonathan	SY19-4	Matsumoto, Tomohiro	<b>PC0601</b>
	PD0703	Mano, Hiroshi	PC0502	Matsumura, Akimichi	PD0720
Lu, Fa	SY10-1		PC0503	Matsumura, Satomi	PA0105
Lu, Fengxia	PB0813	Mano, Tosiuyuki	SY38-2	Matsumura, Shigenobu	PB0617
Lu, Jing	PB0813	Mao, Yanjun	SY35-4	Matsumura, Yasuki	SY57-3
Lu, Shuwen	PA0108/ FT1-13	Maoka, Takashi	PB0301	Matsumura, Yoko	<b>PB1108</b>
	PC1328	Marette, Andre	<b>SL</b>	Matsunaga, Takeshi	PC0719
Lu, Ting-Jang	PC1904	Martin-Morales, Agustín	<b>PC1603</b>	Matsushita, Aya	PC0503
Lu, Tsung-Han	PD0502	Martin-Rosique, R.	SY48-4	Matsutomo, Toshiaki	<b>SY19-1</b>
	PC1904	Martins, Igor Rodrigues	PB0406	Matsuura, Yasushi	PC1311
	PD0502		PB0407	Matsuyama, Hiroki	PA0604
	<b>PD0702/ FT3-09</b>	Marugame, Yuki	<b>PB1101</b>		PB0109
	PD0712/ YIA-40		PC1402		<b>PC0903</b>
	PD0906	Maruyama, Wakako	SY44-2		PC0905
	PD0906	Maruyama, Yasutune	PC0111		PC1311
Lu, Yingjian	<b>PB0813</b>	Maryanto	PD0709/ FT2-07	Matsuyama, Makoto	PB0717
Lu, Zhaoxin	<b>PA0107</b>		SY06-2	Matsuyama, Shota	SY43-4
	PB0813	Masubuchi, Yasunori	SY33-6	Matumoto, Shoji	PC0903
Luis, Paula B.	SY44-1	Masuda, Masashi	PC0302	Md Saddam, Hossain	<b>LS05-3</b>
Luo, Sihao	PD0105		SY47-4	Medeiros, Marisa H.G.	SY27-1
Lyu, Bochao	SY08-4	Masuda, Takamasa	<b>PD0109</b>	Meguro, Shinichi	<b>SY15-3</b>
		Masuda, Takeshi	PD0104	Mei, Nai-Wen	PC0701
		Masumoto, Naoko	PC0409	Men, Yan	PD0706
		Masuyama, Yuuka	<b>SY16-4</b>	Mengumphan, Kriangsak	PA0508
		Masuzaki, Hiroaki	PC1305/ YIA-32		PA0509
		Matsuda, Hideo	PB0413		PB0417
			PC1326	Miao, Yelian	<b>SY10-1</b>
		Matsuda, Manae	<b>PC1007/ YIA-26</b>	Michon, C.	SY48-4
			PC1010/ YIA-27	Miele, Sergio	PA0209
		Matsuda, Rintaro	PC1013	Mikame, Keigo	PB0713
			PB0503	Mikami, Ayane	<b>PC1205</b>
		Matsui, Mayu	SY04-5/ YIA-18	Miki, Yoshimi	PC0202
		Matsui, Toshiro	SY13-4	Miki, Yukari	PC1701/ FT2-13
			SY18-5/ YIA-08	Milašičtė, Gintarė	PA0806
			<b>SY24-3</b>	Miller, Marshall G.	SY21-4
			SY38-5	Miller, Neil	PB0724
			PA0815	Minami, Ikuko	<b>PB0736</b>
			PB0612/ YIA-07		<b>PD0613</b>
			PC0402/ YIA-10	Minami, Kotono	PB1101
			PC0404/ YIA-17	Minami, Yuji	PB0405
			PC0405/ YIA-19	Minamino, Naoto	PC0804
				Minamiyama, Yukiko	PC0802
				Minato, Ken-ichiro	<b>SY29-4</b>
					<b>SY38-3</b>
					<b>PC0206</b>
					PC0715
Mallabo, Martin Raemond B.	SY38-1			Mine, Yoshinori	<b>PL4</b>
Mamiya, Ayane	PA0106			Miquel, S.	SY48-4
				Miranda, Cristobal L.	SY25-4

Name	Abstract	Name	Abstract	Name	Abstract
Mirfat, A.H.S.	SY36-1		YIA-37		PD0609/
Misaka, Takumi	SY43-3	Mizoue, Tetsuya	PC1214		FT2-11
Mitani, Takakazu	PB0204	Mizuguchi, Hisae	PA0404	Muliawan, Jocelin	SY11-5
	PB0741	Mizuno, Kazunori	PC0109	Mulinacci, Nadia	PA0209
	<b>PC1409</b>		PC1805	Munawaroh, Heli Siti Halimatul	PA0502
	PC1809		PD0102	Munemasa, Shintaro	PA0406
Mitchell, Alyson E.	<b>PL2</b>	Mizuno, Kei	PB1016		PB0710
Mitsuhashi, Yuji	PC0904	Mizushima, Katsura	PC0208		PB0906
Mitsuya, Takayuki	SY02-5	Mizutani, Eri	PA0404		PB1003
Mitsuzane, Rikito	<b>PB0710</b>	Mizutani, Makoto	PA0405	Muniz, Pilar	PA0812
		Mo, Zhenzhen	SY53-5		<b>PB0702</b>
Miura, Atsushi	SY37-5/	Mochida, Naoko	PB1108	Murakami, Akira	SY17-6/
	YIA-29	Mochizuki, Mika	SY47-4		YIA-30
	PB0104/		PC0403		<b>SY39-1</b>
	YIA-05	Mochizuki, Nahoko	PA0215		PC0708
	PC1212/	Mochizuki, Satoshi	PC0407		PC1322
	FT3-10	Mohamed, Suhaila	PC1316	Murakami, Makoto	PC0202
Miura, Shinji	SY27-5/	Mohd. Shukri, M.A.	SY36-1	Muramatsu, Nao	SY55-3
	YIA-24	Mohri, Shinsuke	SY57-2	Muraoka, Osamu	<b>LS18</b>
	PB0403	Momiyama, Yukihiro	<b>SY08-2</b>		PC1336
	PC1010/	Monoi, Noriyuki	PA0705	Murase, Daiki	<b>SY11-4</b>
	YIA-27	Moon, Jae-Hak	<b>SY03-2</b>	Murata, Motoki	PC1101
Miura, Yutaka	<b>SY51-3</b>	Moon, Nayoung	PB0738		<b>PC1402</b>
	PC0207	Moongngarm, Anuchita	SY41-4	Murata, Yoshiyuki	PA0406
	PC1004		<b>PA0208</b>		PB0710
	LS05-2		PA0602		PB0904
Miwa, Kiyoshi	PA0213	Moontree, Tanongsak	PA0803		PB0906
Miyake, Naoko	PB0502	Mora, Leticia	<b>PA0803</b>		PB1003
Miyake, Yoshiaki	SY04-3	Morand, Christine	SY24-2	Muro, Takato	SY53-2
Miyamoto, Ken-ichi	<b>SY27-1</b>	Morgan, Marsha	<b>KL4</b>	Murota, Kaeko	<b>PB0412</b>
Miyamoto, Sayuri	PB0406	Morikawa, Miori	PD0403		PB0413
	PD0106/		PB0413		PC0406/
	YIA-36		PC1326		YIA-20
Miyanabe, Masakatsu	PC1801	Morikawa, Toshio	<b>PC1336</b>		PC1326
Miyashita, Kazuo	<b>PL1</b>	Morimitsu, Yasujiro	PA0601	<b>N</b>	
	PA0504/		PC1312	Na, Hye-Kyung	<b>SY12-2</b>
	FT3-01	Morishita, Hirona	<b>PC0205</b>		PC1913
	PC1705	Morita, Takeshi	<b>SY47-3</b>		PC1914
Miyata, Ryo	PC1323/	Morita, Tomoka	SY08-4	Nagafusa, Hideyuki	PC1209
	YIA-33	Moriya, Daiki	<b>PB1003</b>	Nagahama, Kiyoko	SY25-5
Miyata, Satoshi	PC0611	Moriya, Takahiro	<b>SY34-3</b>		<b>PA0809</b>
Miyatake, Koji	PA0218	Motomatsu, Yui	PD0201		SY47-4
Miyuchi, Satoshi	SY22-5/	Motono, Yuki	<b>PA0109</b>	Nagai, Masashi	SY27-3
	YIA-34	Muchimapura, Supaporn	PA0306	Nagai, Mime	<b>SY27-3</b>
	<b>PC1321</b>		PC1334	Nagai, Ryoji	<b>SY27-3</b>
	<b>PB0106</b>	Muchimapura, Suparporn	<b>PC0606</b>	Nagano, Kazuya	SY06-1
Miyazaki, Aoi	SY38-5	Muhajir, H.	SY36-1	Nagano, Takao	<b>PB0208</b>
Miyazaki, Yoshiyuki	PB0707	Muhlhausler, Beverly	SY38-6/	Nagao, Fumi	PB1006
Miyazawa, Taiki	<b>LS13</b>		YIA-03	Nagao, Koji	<b>SY05-2</b>
Miyazawa, Teruo	PC0401		PB0205	Nagao, Toshihiro	<b>SY05-1</b>
	<b>SY27-4</b>	Mukai, Rie	PC1003	Nagao, Tsubasa	PB1105/
	PB0403		<b>PC1006</b>		YIA-15
	PB0602	Mukai, Takako	PC1305/	Nagaoka, Satoshi	<b>SY18-4</b>
	PB1106		YIA-32		PD0707
	PC0203	Mukai, Yuuka	PC1703	Nagasaki, Yuki	PC0202
	PC1311	Muktasam	PA0808/	Nagasawa, Takashi	<b>SY55-3</b>
	PD0301/		FT2-10		



Name	Abstract	Name	Abstract	Name	Abstract
Nagashima, Reiko	PD0404		PA0406	Nguyen, Huu-Nghi	SY13-4
Nagata, Akika	<b>PB0403</b> PB1106 PC1016		PB0710 PB0904 PB0906		PC0404/ YIA-17 PB0806
Nagata, Takeshi	<b>PC1335</b>		PB1003	Nguyen, Thu M.	PA0807
Nagatomo, Akifumi	<b>PC1015</b>	Nakanishi, Akihito	PB1105/ YIA-15	Ni, Chunlei	PB0711
Nagayama, Suminori	<b>PC1316</b>		PC0203	Nii, Mika	SY18-5/ YIA-08
Nahar, Nazmun	<b>SY11-3</b>	Nakanishi, Reiji	<b>PB0414</b>	Nikawa, Takeshi	PC1701/ FT2-13
Naito, Kentaro	<b>SY28-2</b> <b>SY17-4</b> <b>LS07</b> LS17 PB0604	Nakano, Masahiro	SY47-4		<b>PA0103</b> <b>PA0502</b> SY30-4
	PB0811	Nakano, Yoshihisa	PB0211	Ningrum, Andriati	PC1336 PB0905
	PB0812	Nakao, Aoi	PD0720		PA0207
	PC0208	Nakao, Nobuhiro	PC1005	Ninomiya, Kazumi	PC1314
	PC1206	Nakao, Noriko	SY13-5	Ninomiya, Kiyofumi	PB0612/ YIA-07
Nakagawa, Hiroyuki	PC1302	Nakao, Reiko	SY18-5/ YIA-08	Ninomiya, Yasuharu	PC1336
Nakagawa, Kiyotaka	<b>SY21-1</b> <b>LS02</b>		PC1701/ FT2-13	Nion, Yanetri Asi	PA0207
	PB0707	Nakao, Tomohiro	<b>SY06-1</b>	Nirasawa, Takashi	PA0216
	PC0401	Nakao, Yoichi	PB0805	Nishi, Kosuke	PC0208
	PC1803	Nakashima, Ayaka	PD0720		<b>SY31-4</b> PC0106
Nakagawa, Toshiyuki	SY53-2	Nakashima, Chika	PB0713	Nishiba, Seiya	<b>PB0715</b> PA0401
Nakagawasai, Osamu	PB0610	Nakashima, Fumie	SY44-1	Nishiba, Yoichi	SY39-2
Nakahara, Junta	SY06-2	Nakashima, Hirono	<b>PA0213</b>	Nishida, Eisuke	<b>SY53-2</b> <b>LS11</b> PA0216
Nakai, Shiho	<b>PC1010/</b> <b>YIA-27</b>	Nakata, Fieko	PC1326	Nishihira, Jun	PC0216
	PD0908	Nakata, Satoru	PC0101		PC0208
Nakajima, Miki	PD0905		PC0601	Nishikawa, Hitomi	SY08-3
Nakajima, Mitsutoshi	<b>PB0905</b>	Nakata, Sayuri	<b>PB0906</b>	Nishikawa, Masazumi	<b>SY04-2</b>
Nakajima, Tetsuo	<b>PC1306</b>	Nakata, Yoshio	PB0410	Nishikawa, Miyu	PB1009 PB1010
Nakamura, Eri	PC1318	Nakatani, Sachie	PC0503		PC0408
Nakamura, Fumiaki	PB0805	Nakatani, Yoko	PD0404		PC0409
Nakamura, Kozo	<b>SY51-2</b> PA0218	Nakatsu, Cindy H.	SY40-3	Nishikawa, Sho	SY21-2 PB1105/ YIA-15
	PC0802	Nakatsukasa, Eriko	<b>PB0401/</b> <b>YIA-06</b>		PB1105/ YIA-15
Nakamura, Megumi	PD0112/ FT1-09	Nakayama, Hiroyuki	PC0610/ YIA-21		<b>PC1323/</b> <b>YIA-33</b>
Nakamura, Seiji	PA0705		<b>SY54-5</b>	Nishimachi, Saori	PA0705
Nakamura, Soichiro	SY30-2	Nakayama, Jiro	<b>PC0408</b>	Nishimoto, Sayaka	PA0809
	PB0741	Nakayama, Mai	SY56-3	Nishimura, Kosaku	PA0402
	PC0615	Nakayama, Yuki	PB0805	Nishimura, Mie	SY53-2 <b>PA0216</b>
	PC1409		PB0502		PC0903
	PC1809	Nakazawa, Shigeaki	<b>SA0306</b>	Nishimura, Saki	PC1005
Nakamura, Toshio	LS05-3	Nakyam, Thuntiva	SY36-6	Nishimura, Toshihide	<b>SY52-1</b>
Nakamura, Toshiya	PC0504	Nalder, Tim	PD0601	Nishimura, Yuichi	PB0704
	PC1333	Nam, Keonwook	PD0602	Nishina, Atsuyoshi	PD0201 SY06-1
Nakamura, Toshiyuki	PA0406 PB0710	Naoe, Kazumitsu	PD0501		<b>PB1015</b>
	<b>PB0904</b>	Naoi, Makoto	SY44-2	Nishino, Masayuki	PC1406
	PB0906	Nectoux, Alexia	<b>SY04-5/</b> <b>YIA-18</b>	Nishino, Mayu	PC0204
	PB1003		PC0402/ YIA-10	Nishitani, Mami	PA0407
Nakamura, Utano	LS05-2	Nemoto, Hisao	PC1006	Nishiyama, Chiharu	PC1903
Nakamura, Yasunori	PC0611	Nemoto, Sho	PB1017	Nishiyama, Hisae	PC1906
Nakamura, Yoriyuki	PA0708	Nemoto, Wataru	PB0610	Nishizaki, Yasuhiro	<b>SY52-2</b>
Nakamura, Yoshimasa	<b>SY12-3</b>	Nenoi, Mitsuru	PB0905		
		Neves, Marcos A.	PD0905		
		Ngernjan, Metas	<b>PB0417</b>	Nishizawa, Mikio	

Name	Abstract	Name	Abstract	Name	Abstract
Niwa, Toshio	<b>PC0403</b>	Ohara, Akihiro	<b>PC0715</b>	Okazaki, Toshiro	SY21-5/
Nobuoka, Kaoru	PC0407	Ohara, Rika	<b>PA0304</b>		YIA-16
Noguchi, Masayuki	PB0810/	Ohashi, Ren	PB1017	Okazeri, Mayu	PB1014
	YIA-11	Ohba, Shinsuke	LS05-2	O'Keeffe, Martina	SY18-2
Nolidin, Karen	SY23-1	Ohinata, Kousaku	PB0617		SY24-4
Nomura, Kaho	<b>PC0502</b>	Ohkubo, Iwao	PB0614	Oktriani, Annisa	PD0708/
	PC0503	Ohkubo, Takeshi	PB0412		FT2-03
Nomura, Sachiko	PA0407	Ohland, Christina	SY15-5	Okubo, Tsutomu	SY17-4
Nomura, Takuya	<b>PC0902/</b>	Ohminami, Hirokazu	SY33-6		PB0812
	<b>YIA-23</b>		PC0302		PC1206
Nomura, Wataru	SY57-2	Ohmori, Hajime	PC1015	Okue, Sachiko	PC0205
	PC1305/		<b>PC1016</b>		<b>PC0607/</b>
	YIA-32	Ohmori, Rie	SY28-3		<b>FT3-11</b>
Nono, Masanori	SY39-2	Ohnishi, Aika	SY33-6	Okui, Hiroyuki	PA0204
Nontasan, Supap	<b>PA0602</b>	Ohnishi, Kohta	<b>SY33-6</b>	Okuma, Mayumi	PA0215
Noridomi, Kikuko	SY33-3		PB1101	Okumura, Hiroki	PB0502
Nozaka, Hiroyuki	<b>PC0504</b>		PC0302	Okuno, Etsuo	PD0613
	<b>PC1333</b>	Ohnishi, Natsumi	<b>PA0203</b>	Okuno, Yoshiharu	PA0407
Nudel, Adi	PC1602/	Ohno, Ayako	PC1701/		<b>PB0712</b>
	FT2-06		FT2-13	Okura, Tomohiro	<b>LS15-1</b>
Nugroho, Agung E.	PA0808/	Ohno, Maki	PC1203	Okutsu, Kayu	<b>SY10-2</b>
	FT2-10	Ohno, Naohito	SY38-4	Okuyama, Mai	PC1327
	PD0609/	Ohno, Naoto	SY04-5/		PC1404
	FT2-11		YIA-18	Onda, Hiroyuki	PA0304
Nuka, Erika	PB1101		PC0402/	Onishi, Takumi	PC1007/
Nur Cahyanto, Muhammad	PD0726/		YIA-10		YIA-26
	YIA-39	Ohno, Rei-ichi	SY27-3		PC1010/
Nur Kartinee, K.	SY36-1	Ohnuki, Koichiro	PD0613		YIA-27
		Ohsawa, Kazuhito	PC0611	Ono, Tomoji	<b>SY34-1</b>
<b>O</b>		Ohta, Kazushi	<b>PC1801</b>	Ono, Yusuke	SY27-5/
Ochi, Masayuki	SY45-2	Ohtsuki, Sumio	PD0109		YIA-24
Ochiai, Kouji	PC0405/	Ohue-Kitano, Ryuji	PC0501	On-ong-arj, Parichart	PB0609
	YIA-19	Ohya, Rena	PC0610/	Onuki, Janice	<b>SY44-4</b>
Odaira, Takayo	PB0610		YIA-21		PB0406
Odamaki, Toshitaka	<b>SY48-3</b>	Ohyagi, Yasumasa	SY45-2	Ootsuyama, Yuko	PB0407
Ogasawara, Honami	PB1015	Oi, Shizuo	<b>LS05-1</b>	O'Rielly, Rebecca	PD0714
	PB1016	Oike, Hideaki	<b>SY41-1</b>	Orihara, Riku	PB0205
Ogata, Yoshiyuki	PC1014		<b>PC0901</b>		PC0607/
Ogata, Yuichiro	PC0101	Oishi, Katsutaka	<b>LS06</b>		FT3-11
Ogawa, Jun	SY05-4		PC0901	Orrego, Carlos	SY49-2
	<b>SY35-3</b>	Oishi, Yasuyuki	PB0105/	Ortiz, Danny Leandro	SY49-2
	PC0501		YIA-04	Osada-Oka, Mayuko	SY29-4
Ogawa, Kazuki	<b>PB0903/</b>	Okabe, Emiko	SY39-2	Osakabe, Naomi	SY13-5
	<b>FT3-03</b>	Okada, Nanako	PA0106		PA0707
Ogawa, Yoshihiro	SY20-4	Okada, Rena	SY06-2		PB1012
Ogawa, Yukiharu	PA0706	Okada, Shinji	PB0812		PC0805
	PB0709	Okada, Yoko	SY45-2		PD0203
	PB0714	Okamoto, Mami	<b>PD0103</b>	Osato, Naoki	PC1305/
	PB0719	Okamoto, Naho	<b>PB1006</b>		YIA-32
	PC1910		PC1702	Osawa, Hikari	<b>PD0303</b>
Ogita, Tasuku	PC1205	Okamoto, Shiki	SY16-4	Osawa, Ro	SY48-1
Ogura, Atsushi	PC0111	Okano, Toshio	PB1012	Osawa, Toshihiko	<b>OL</b>
Ogushi, Misa	<b>PB0211</b>	Okano, Yayako	PB1106		SY47-4
Oh, Jisun	PB0738	Okawa, Fuka	PB0501		PB0502
Oh, Mi-Ra	LS08-2			Osawa, Yoshihiro	PC0403
	LS08-3				PC0502
					PC0503

Name	Abstract	Name	Abstract	Name	Abstract
Oshimo, Moeri	<b>PB0908/</b> <b>YIA-12</b>		PC0712	Pranoto, Yudi	PA0808/ FT2-10
Osorio, Coralia	<b>SY49-2</b>		<b>PC0717</b>		PD0609/ FT2-11
Ota, Akira	SY25-5		PC0718		
Ota, Masako	PC0713		PC1307	Pudjiastuti, Sri	PC0505/ FT3-14
Otani, Hiroki	PC1908		PC1309/ FT3-13		
	PD0404	Pan, Xiaohua	PC1328	Pukalskienė, Milda	PA0806
Oteiza, Patricia I.	PL6	Pan, Xu-Chi	SY31-3	Punvittayagul, Charatda	PC0706
Ottaviani, Javier	PSY-2	Panakaporn, Wannanon	<b>PC1407</b>	Purnomo, Eko H.	PA0311/ FT2-01
Otsuka, Airi	<b>PC0608</b>	Pang, Yanghee	PA0305		
Otsuka, Kurataka	<b>SY37-3</b>		PA0701	Purwestri, Yekti A.	PA0808/ FT2-10
Otsuka, Rei	<b>SY01-3</b>	Pao, Ching-I.	PD0402		PD0609/ FT2-11
Ou Yang, Rui	PD0618/ FT3-15	Pao, Li-Heng	PA0201		
	PC1320/ FT3-05	Parijadi, Anjaritha A.R.	PB1004	Puteri, Maria Gunawan	PC1314
Ou, Chu-Chyn	<b>SY07-4</b>	Park, Byung-Hyun	PA0217	Putri, Sastia P.	SY10-4/ YIA-01
Ou, Shiyi	PD0710		LS08-1		<b>PA0217</b>
	PB1108	Park, Eun-Ock	LS08-3	Putthiwat, Thongwong	<b>PA0305</b>
Ouji-Sageshima, Noriko	<b>PC1012/</b>		LS08-2		
Oyabu, Mamoru	<b>YIA-25</b>	Park, Ho-Young	LS08-3	<b>Q</b>	
	PC1013	Park, Hye-Ryung	LS08-3	Qi, Wentao	PC1411
Oyong, Glenn	PB1008		PC1204	Qi-An	PB1104
Ozaki, Erika	PC0504	Park, Hyun Young	PC0716	Qin, Wei	<b>PA0706</b>
	PC1333		<b>PC1204</b>		PB0719
	PA0215	Park, Ji-Ho	PB0741		
Ozaki, Manami	SY37-5/ YIA-29	Park, Jihye	PC0615	<b>R</b>	
Ozaki-Masuzawa, Yori	PB0104/ YIA-05	Park, Ji-Yeon	PC0809	Radavelli Bagatini, Simone	PB1107
	PB0810/ YIA-11	Park, Jiyong	PC1802	Rahmawati, Della	<b>PA0207</b>
	PC0205	Park, Jiyoung	PC0102		PC1314
	PC0607/ FT3-11	Park, Jong-Hwan	PC1202	Rao, Pingfan	<b>PL7</b>
	PC1212/ FT3-10	Park, Kyungho	PD0603		PA0310
	PC1306	Park, Soo-Hyun	<b>SY16-2</b>		PA0711/ FT1-11
Ozawa, Ayaka	<b>PC1318</b>	Park, Yeeun	PC0102		PA0815
	SY02-5	Pattaneeya, Prangthip	LS05-3		PC1704
	SY17-4	Pegg, Ronald	LS08-2		PC1912
	PB0812	Pei, Chenchen	LS08-3		PD0105
	PC1206	Pei, Jinjin	PC1201	Rattan, Suresh	<b>SY39-3</b>
		Peng, Han	PB1006	Reginio Jr., Florencio C.	<b>PB0719</b>
		Peng, Shwu-Ling	<b>PB0705</b>	Reid, Janet	PD0609/ FT2-11
			PC0210		
			<b>PD0717</b>	Reig, Milagro	SY24-2
		Peng, Zhangwen	PD0105	Rha, Chan-Su	PD0101
		Phannasorn, Warunyoo	PB0720/ FT2-05	Rhyu, Mee-Ra	<b>SY43-1</b>
			SY30-5	Ridwani, Sobir	PA0217
		Pharapirom, Aroonrat	<b>PC0711/</b> <b>FT1-05</b>	Ridwansyah	PB0728/ FT2-04
			PC1208/ FT1-14	Rimbawan	PC0505/ FT3-14
Palangasinghe, Indika	<b>PA0804</b>	Pinkaew, Siwaporn	SY27-1	Rivero-Perez, M. D.	PA0812
Pan, Bonnie Sun	PC0609		<b>SY03-3</b>		PB0702
Pan, Bo-Syong	PA0814	Pinto, Isabella F.D.	PC1336	Robertson, Sarah	SY38-6/ YIA-03
Pan, Chaoyi	PC1704	Piskula, Mariusz K.	<b>SY20-3</b>		PB2005
Pan, Jingfeng	PB0616	Pongpiriyadacha, Yutana	<b>SY41-4</b>	Rodrigo-Garcia, J	<b>SY03-6</b>
Pan, Li-Long	SY31-3	Pospisilik, J. Andrew		Rodriguez Daza, Maria-Carolina	SY13-2
Pan, Min-Hsiung	SY02-3	Pranil, Thorung			
	PC0209				
	PC0701				

Name	Abstract	Name	Abstract	Name	Abstract
Roh, Young Hoon	PC1202 PD0601 PD0602 PD0603	Sakakibara, Yoichi	SY25-5 PA0501 PA0809 PB0804	Sato, Kazunobu Sato, Kenichiro Sato, Kenji	PB0502 PC1005 SY22-5/ YIA-34 SY30-5
Roiduong, Sunisa Rojviriya, Catleya Romaszko, Ewa Rosalina, Sisca D.	PA0208 PB1008 SY03-3 PD0609/ FT2-11	Sakane, Iwao Sakao, Kozue	<b>SY33-3</b> PB0808 PC0301 PC1329 PC1407 PD0907 SY06-1 PB0503 PB0503 PA0604 PB0109 PC0903 PC0905 PC1311 PA0402		<b>LS09</b> PA0816 PB0106 PB0604 PB0605 PB0613 PC0711/ FT1-05 PC1321 PC1603 PC1808/ FT1-04 PD0112/ FT1-09
Rosicka-Kaczmarek, Justyna Roy, Denis Rumiyati	PD0729 SY13-2 <b>PA0808/ FT2-10</b> PD0609/ FT2-11 SY21-4 <b>PD0403</b> PA0816	Sakata, Makoto Sakaue, Motoyoshi Sakaue, Shiori Sakono, Masanobu			
Rutledge, Grant A. Rybak, Michael Ryu, Myeong Seon		Sakuda, Shozo Sakuma, Masae	<b>SY26-2</b> PB0610 PB0610 SY57-3 <b>PA0812</b> PB0702 PA0808/ FT2-10 <b>PD0609/ FT2-11</b> PB0602	Sato, Koki Sato, Kyoko Sato, Masao	PC0611 PD0104 <b>LS16</b> PC1214 PB0617 PB105/ YIA-04
<b>S</b>		Salazar-Mardones, Gonzalo	<b>PA0812</b> PB0702 PA0808/ FT2-10 <b>PD0609/ FT2-11</b> PB0602	Sato, Masaru Sato, Mikako	PC1214 PB0617 PB105/ YIA-04
Sachitharani, Shanika Saenjurn, Chalermpong Saido, Takaomi C.	PA0804 SY42-3 PC0607/ FT3-11 PA0213 PA0219 <b>PA0708</b> <b>PB0803</b> PC1005 PC0607/ FT3-11 PB0902/ FT2-14	Saloko, Satrijo		Sato, Ryuichiro Sato, Sachiko Sato, Saki Sato, Taiki Sato, Tomonori Sato, Yuka	<b>KL3</b> <b>PC1338</b> PB0405 PB1014 SY55-3 PC1402
Saiki, Yusuke Saito, Akiko Saito, Kieko Saito, Masahiro Saito, Takaki Saito, Takashi	PC0607/ FT3-11 PB0902/ FT2-14	Sanada, Tatsuya Sang, Shengmin Sangsopha, Jintana Sano, Munetaka Sano, Sho	<b>SB0901/ FT3-02</b> PA0215 PC1807 SY33-6 <b>PC0302</b> PC0101 PC0601 SY27-3 SY04-2 <b>SY32-3</b> PB1009 PB1010 PB1012 PB1017 PC0408 PC0409 PD0908 PA0604 PB0109 PC0903 <b>PC0905</b> PC1311	Sato-Baran, Iri Satoh, Kouji Satsu, Hideo	<b>SY28-4</b> PA0216 PB0102 PB0614 PB0704 PB0804 PC1313 PD0201 <b>PD0202</b> PB0418 SY23-1 PA0203 <b>PB0605</b> PC1808/ FT1-04 PD0501 PA0401 SY34-3 <b>SY15-2</b> PC0103 PC0104 PC1209 SY07-3 <b>SY44-1</b>
Saito, Takeshi		Sano, Takashi Sansada, Yohei Santoso, Jevon Ardi Sarapinienè, Ieva Sarassina, R.R. Fosa		Sattang, Supaporn Savage, Karen Sawabe, Akiyoshi Sawada, Kazuhiro	
Sakaguchi, Tomoya		Sari, Puspita	SY51-4 <b>PA0702</b> <b>PD0709/ FT2-07</b> PD0302 PD0901 SY56-3 <b>PB0805</b> PA0213 PC0405/ YIA-19 PC0804 LS12 PB0703 <b>PB0105/ YIA-04</b>	Sawai, Jun Sawai, Yusuke Sawauchi, Miho Sayama, Kazutoshi	
Sakai, Hiroyasu		Sasaki, Akira		Schaffer, Stephen W. Schneider, Claus	
Sakai, Maiko		Sasaki, Hiroyuki			
Sakaida, Tsutomu		Sasaki, Kensuke Sasaki, Kuni			
Sakake, Shiori Sakaki, Toshiyuki		Sasaki, Maho Sasaki, Tetsuya Sato, Akari Sato, Kanako			
Sakakibara, Hiroyuki					

Name	Abstract	Name	Abstract	Name	Abstract
Schroeter, Hagen	PSY-2		PB0107		PD0708/
Scott, Tammy M.	SY21-4		PB0725		FT2-03
Searle, Iain	SY38-6/ YIA-03	Shi, Yuan-de	PC0612 PA0802/ FT1-10	Shirakawa, Jun-ichi Shiraki, Nobuaki Shirako, Saki	SY27-3 PC1503 <b>SY22-5/ YIA-34</b>
Seechamnaturakit, Vatcharee	PB0205 PD0716		<b>PD0618/ FT3-15</b>		<b>PA0501</b>
Segawa, Hiroko	<b>SY04-3</b>	Shibata, Daisuke	SY57-2	Shirasugi, Ichiro	PB1017
Seki, Eiji	<b>PB0614</b>		SY57-3	Shiro, Yoshitsugu	PC1214
Seki, Kohei	PC0611	Shibata, Shigenobu	SY56-3	Shirouchi, Bungo	PC0608
Seki, Mahiro	<b>PA0212</b>		PB0805	Shiuchi, Tetsuya	SY10-3
Seki, Taichiro	SY37-5/ YIA-29	Shibata, Tatsuo	PA0404	Shoji, Kumiko	PD0301/ YIA-37
	PB0104/ YIA-05	Shibutani, Makoto	<b>SY06-2</b>		PD0301/ YIA-37
	PB0810/ YIA-11	Shiga, Kazuto	SY56-3	Shoji, Yutaka	PD0906
	PC0205	Shigemura, Yasutaka	<b>SY30-3</b>		<b>SY21-4</b>
	PC0607/ FT3-11		PD0102	Show, Bio Chia	PB1107
	PC1212/ FT3-10	Shih, Yu-Hsuan	<b>PA0221</b>	Shukitt-Hale, Barbara	PD0403
Sekiguchi, Hirotaka	PB1101	Shih, Yu-Yuan	<b>PC0810</b>	Sim, Marc	SY23-1
Sekikawa, Takahiro	PB0303/ YIA-22	Shiina, Yasuhiko	<b>PC1325</b>	Simon, Patrick	PB0806
	SY13-1	Shim, Kyungwon	PC0901	Simpson, Tamara	<b>PC0706</b>
Selma, Victoria	<b>PA0503</b>	Shimabukuro, Michio	PC1201	Sims, Ian	PC0710
Senadheera, Tharindu R.L.	SY28-3	Shimizu, Jun	SY16-4	Singai, Chonikarn	PC1410
Senda, Asuna	PC1305/ YIA-32		<b>SY16-5</b>		SY18-1
Seno, Shigeto	SY27-5/ YIA-24	Shimizu, Kazunori	PC0502	Singh, Krishna B.	<b>SY33-1</b>
	PB0403	Shimizu, Kuniyoshi	PC0503	Singh, Nisha	PC1410
	PA0816	Shimizu, Makoto	PD0707	Singh, Shivendra V.	PB0807
Senoo, Nanami	SY27-5/ YIA-24		PD0613		PA0806
	PB0403	Shimizu, Naoki	<b>PL8</b>	Sirinupong, Nualpun	SY36-5
Seo, Jiwon	PA0816	Shimizu, Norihito	<b>SY47-1</b>	Skeberdis, Vytenis A.	<b>PC0709/ FT2-12</b>
Seo, Kiki	SY37-5/ YIA-29	Shimizu, Takahiko	PC1803	Skoczylas, Joanna	PD0403
	YIA-29		PD0701	So, Visessakseth	PA0311/ FT2-01
Seo, Kunho	SY49-1	Shimoda, Hiroshi	SY27-5/ YIA-24	Sobus, Jon	<b>PD0720</b>
Setiawan, Budi	PC0505/ FT3-14	Shimoi, Kayoko	PD0701	Soedirga, Lucia C.	SY48-4
Setyaningsih, Widiastuti	PA0103	Shimomura, Yoshiharu	PC1905		<b>PA0505</b>
Shafira	PD0709/ FT2-07	Shimosato, Takeshi	<b>SY55-2</b>	Sofyana, Neng Tanty	<b>PC0604</b>
Shahidi, Fereidoon	<b>KL6</b>	Shimura, Mariko	PC1205	Sokol, H.	<b>PC0605</b>
	PA0503	Shin, Dong-Hwa	PA0104	Son, Kkonnip	PD0802
	PB0705	Shin, Kwang-Soon	<b>SY42-2</b>	Son, Yelim	PB0108
Shao, Meili	<b>PB0801</b>		<b>PA0816</b>		<b>PD0402</b>
	PB1001	Shin, Yong Sub	PC0716	Song, Huan-Lu	<b>SY37-4</b>
Shao, Mei-Li	PB0601	Shindo, Hitoshi	PC1204	Song, Qi	<b>SY32-4</b>
Shaw, Jonathan E	PB1107		<b>SY09-4</b>	Song, Sihan	PB1008
Sheen, Lee Yan	<b>SY14-3</b>	Shinmachi, Fumie	PA0105	Sonoyama, Kei	<b>FT1-03</b>
Shen, Siou-Ru	<b>PC1331</b>	Shinohara, Hiroe	PA0106	Spitz, Joerg	<b>SY50-1</b>
Shen, Szu-Chuan	<b>PC0602</b>	Shinya, Daisuke	SY30-4	Sreenivasulu, Nese	<b>SY45-3</b>
Shen, Weilin	<b>SY18-5/ YIA-08</b>	Shioji, Yudai	SY47-4	Sridhar, Kandi	PD0403
	<b>SY42-1</b>	Shiotani, Akiko	PB0711		<b>SY25-4</b>
Shetty, Kalidas	SY42-3	Shiotani, Shigenobu	<b>PB0602</b>	Srinivasan, Krishnapura	<b>SY23-1</b>
	SY09-1	Shiozawa, Kenjiro	LS17	Sriraam, V.T.	<b>PA0818</b>
Shi, Ching-Ming	PB0103	Shirai, Yasuhito	PC1005	Sternberg, Maya	PB0731
Shi, Yonghui		Shiraishi, Kaho	PB0810/ YIA-11	Stevens, Jan F.	PD0732
		Shirakawa, Hitoshi	<b>SY15-4</b>	Stough, Con	PD0110
			<b>PC0207</b>	Su, Chieh-Yin	
			PA0303	Su, Nan-Wei	

Name	Abstract	Name	Abstract	Name	Abstract
Su, Pingping	PA0802/ FT1-10	Sun, Hui	PC1411	Taguchi, Chie	PB0718
Subramaniam, Raman	SY32-2/ YIA-38	Sun, Jia	<b>SY31-3</b>	Tai, Hsiao-En	<b>PB1018</b>
Suekawa, Yutaka	PC0504 PC1333	Sun, Jingyuan	PA0712	Taira, Eiichi	PC1338
Suga, Naoko	<b>SY17-6/ YIA-30</b> SY44-2 PB1106	Sun, Qingrui	PB0302	Taira, Shu	SY13-5
Sugahara, Takuya	SY31-4 PA0304 PC0106	Sun, Ying	<b>PC1211</b>	Tajiri, Hayato	PB0109
Sugano, Michihiro	SY18-3	Sun, Yuanxia	<b>PD0706</b>	Taka, Enrei	<b>PC1311</b>
Suganuma, Hiroyuki	SY57-3 PB0811	Sundar, Durai	PC0704	Takada, Tappei	PD0705
Sugawa, Hikari	PC1313	Supaporn, Muchimapura	PA0305	Takagi, Tappei	PB0704
Sugawara, Tatsuya	PC1903 PC1906	Supriharyanti, Elisabeth	PD0401	Takagi, Hiroshi	PC0101
Sugiki, Mikio	SY27-3 SY21-5/ YIA-16	Supriyadi	PD0609/ FT2-11	Takagi, Tomohisa	PC0601 SY17-4
Sugimoto, Aoi	<b>LS14-1</b>	Surh, Young-Joon	<b>KL1</b>		LS07
Sugimoto, Chiaki	PB0301		SY14-4		PB0811
Sugimoto, Hiroshi	PC1801	Susanto, Adrian	PC1913	Takagi, Youhei	PC0208
Sugimoto, Keiichiro	PC1804	Susanto, Eko	PC1914	Takagi, Yuta	PC1206
Sugimoto, Yukio	PD0720	Suseno, Thomas I.P.	<b>PD0610</b>	Takahashi, Asako	<b>PC1303</b>
Sugino, Teizo	PB0903/ FT3-03	Susilawati, Ceacilia E.	<b>PA0504/ FT3-01</b>	Takahashi, Haruya	<b>PB1013</b>
Sugita, Takuya	SY44-2	Sutoh, Keita	PA0810	Takahashi, Haruya	<b>PA0309</b>
Sugiura, Kosuke	<b>PB0607/ FT1-01</b>	Sutthanut, Khaetthareeya	PD0401		SY57-2
Sugiura, Minoru	PB1017	Suwannachot, Jutalak	PB1101		PC1305/ YIA-32
Suh, J.H.	PC1002/ YIA-28	Suyama, Kyoza	PA0811	Takahashi, Junichiro	PD0302
Suhara, Yoshitomo	<b>PC0111</b>	Suzuki, Ayako	<b>PB0709</b>	Takahashi, Kohei	PB0610
Suihara, Satoki	SY05-1	Suzuki, Daito	PC1601	Takahashi, Kometaro	PB0415
Suiko, Masahito	PC1311	Suzuki, Hideyuki	<b>PC0407</b>	Takahashi, Kyoko	PB0909
Sukegawa, Ryo	PC1701/ FT2-13	Suzuki, Hiroaki	PC1313	Takahashi, Mai	PC0607/ FT3-11
Sukhbold, Enkhtsetseg	<b>SY03-1</b>	Suzuki, Junko	PB0617		<b>PB0501</b>
Sul, O.S.	PC0506	Suzuki, Katsuya	PB0410	Takahashi, Masakazu	<b>PB0501</b>
Sun Pan, Bonnie	SY32-1/ YIA-14	Suzuki, Kengo	PB0704	Takahashi, Masaki	PD0901
	PB1007	Suzuki, Kenta	PA0404		<b>PD0903</b>
	PB1011	Suzuki, Masahiko	<b>SY19-3</b>	Takahashi, Miho	<b>PC0103</b>
	PB1012	Suzuki, Ryusuke	PB0614	Takahashi, Nobuyuki	SY26-3
	PB1013	Suzuki, Takuya	<b>SY23-4</b>		PB0413
	PB1014	Suzuki, Toshio	PB0211		PC0501
	PC0708	Suzuki, Yasushi A.	PD0720		<b>PC1326</b>
	<b>PC1322</b>	Suzuki, Junko	PA0707		PC1401
	SY25-5	Suzuki, Yu	PA0707		PC0802
	PA0501	Suzuki-Yamamoto, Toshiko	PB0804	Takahashi, Ryuto	PC0802
	PA0707		SY27-3	Takahashi, Saori	PA0402
	PC0105		PC1207/ YIA-31	Takahashi, Shiho	PA0801
	PC0506		YIA-31	Takahashi, Shingo	SY57-3
	PA0815		SY55-4	Takahashi, Shoko	<b>SY40-2</b>
			PD0112/ FT1-09	Takahashi, Shinori	<b>SY09-3</b>
			PC1311		PC0901
			PC0201	Takahashi, Yoshitaka	PC0201
			<b>PC0202</b>	Takahashi, Yumiko	PC0202
				Takahashi, Takakura, Takuya	SY53-1 PB0721/ YIA-09
				Takano-Ishikawa, Yuko	PB0206 PC1302
				Takao, Kazuhiro	PC0405/ YIA-19
				Takaoka, Motoko	PA0109
				Takara, Tsuyoshi	PB0303/ YIA-22
				Takarada, Toru	PD0701
				Takase, Takahito	<b>PC1003</b>

Name	Abstract	Name	Abstract	Name	Abstract
Takashima, Akiko	PD0704		PC1401		PC0709/ FT2-12
Takashima, Masakatsu	PB0109	Tanaka, Mitsuru	<b>SY13-4</b>		PC1334
Takashimizu, Shinji	PC1903		SY18-5/ YIA-08	Tian, Chaoyu	PB0209
Takasu, Soo	PC0401		PB0612/ YIA-07	Tian, Su	PA0218
Takasugi, Mikako	PB0722		PC0404/ YIA-17	TIAN, Xiaohong	PD0615
	PC0105		PC1807	Tian, Xiaokuo	PC1315
	<b>PC0108</b>		<b>PB0503</b>	Tian, Ying-Hua	<b>PA0206</b>
Takata, Fuyuko	PB0612/ YIA-07	Tanaka, Riho	SY27-3	Tian, Yunbo	SY05-6
Takayama, Naoya	PC1807	Tanaka, Sarasa	<b>LS12</b>	Tiozon Jr., Rhowell N.	<b>PB1008</b>
Takayanagi, Masayoshi	PC1303	Tanaka, Seitaro	SY05-1	Tjandrawinata, Raymond Rubianto	PC1310
Takayasu, Bianca S.	SY44-4	Tanaka, Seiya	SY06-2	Tobita, Akari	PC0204
Takeda, Shigeki	PB0715	Tanaka, Shigemitsu	<b>SY06-3</b>	Toda, Keisuke	PC0201
Takeda, Shogo	<b>PD0701</b>	Tanaka, Takaharu	<b>PA0604</b>		PC0202
Takeda, Ushio	PD0109	Tanaka, Toshio	PB0109	Toda, Yasuka	<b>SY43-3</b>
	PC1016	Tanaka, Wataru	PC0903	Togashi, Takumi	PA0215
Takehara, Masaaki	SY29-4		PC0905	Tokiwa, Soshi	PC1305/ YIA-32
Takemura, Shigekazu	PB0104/ YIA-05		PC1311	Toko, Rine	PC0105
Takenaka, Asako	PC0715	Tandia, Mahamadou	PB1105/ YIA-15	Tokumura, Akira	PB0412
Takenaka, Hiroyuki	PC1209		PA0302	Tokuoka, Masafumi	PA0105
Takeshita, Haruko	SY33-6	Tang, Shu-Hua	PD0108		PA0106
Taketani, Yutaka	PC0302		PC1904	Tokuyama, Chika	PC1905
	PB0718	Tang, Yu-Jin	PC1907	Toldra, Fidel	<b>SY24-2</b>
Takeuchi, Ikue	SY35-3		<b>PC0104</b>	Tomas-Bárberán, Francisco A.	<b>SY13-1</b>
Takeuchi, Michiki	<b>PC1011</b>	Tange, Maho	PC0406/ YIA-20	Tomata, Yasutake	SY54-2
Takigawa, Kaho	PC1012/ YIA-25	Tani, Hiroko	PB0503	Tomatsu, Sayaka	PD0704
	PA0402	Tani, Mariko	<b>PB0708</b>	Tomimoto, Rei	PA0215
Takita, Teisuke	<b>PB1017</b>	Taniguchi, Asuka	PB0604	Tominaga, Naoki	<b>SY03-4</b>
	PB0502	Taniguchi, Hirokazu	PC0206		PA0216
Takui, Takeji	PC0708	Taniguchi, Tomoo	SY44-3	Tominaga, Yu-ki	SY27-3
Takuwa, Rina	<b>PC0201</b>	Taniguchi, Tomoyuki	<b>PB0617</b>	Tomita, Saori	PC0206
Tamenobu, Asako	PC0202	Tanikawa, Kana	PB0610	Tomonaga, Nami	PB0301
	PA0806	Tan-no, Koichi	PB0806		<b>PC1804</b>
Tamkuté, Laura	<b>PA0811</b>	Tannock, Gerald	PD0104	Tong-Un, Terdthai	PC1334
Tamprasit, Kawintra	<b>SY56-3</b>	Tatebe, Chie	<b>PA0202</b>	Torii, Kota	<b>PC1317</b>
Tamura, Konomi	PD0615	Tateyama, Chigusa	SY30-5	Totoki, Shigeyuki	PB0721/ YIA-09
Tan, Bin	PD0803	Taya, Sirinya	PC0710		PC1005
Tan, Jia	PA0302		PA0207	Tousen, Yuko	<b>SY46-2</b>
Tan, Jin	<b>PD0108</b>	Teji, Stevan	PB0601	Toyoda, Yu	PB0704
	PB0601	Teng, Fei	PB0801	Toyoda, Yuki	PC0204
Tan, Jun-Yan	<b>PC1604</b>		<b>PB1001</b>	Toyokuni, Shinya	<b>SY29-1</b>
Tan, Xinwei	PB0723	Terada, Hidetoshi	PD0107	Toyonaga, Misato	PA0215
Tan, Yan Qin	PA0401	Terada, Yuko	PB0403	Tozuka, Yuichi	SY28-3
Tanahara, Naoya	PA0801	Teraguchi, Ai	PC1335	Tsai, Chih-Chiang	PC1210
Tanaka, Anon	PC0401	Terao, Junji	PC1006	Tsai, Hsin-Ya	<b>PD0110</b>
Tanaka, Fukuyo	PC0101	Terao, Keiji	PC0705	Tsai, Hui-Yun	SY23-5
Tanaka, Hiroyuki	PC0601	Teraoka, Yoshiaki	PC1404		PC0613
	<b>SY32-5</b>	Tetsui, Junko	SY38-4		PC0614
Tanaka, Kiyoshi	PB1016	Thillekeratne, Visakha	PA0813		PC0810
	SY26-3	Thomas, M.	SY48-4	Tsai, Mei-Chih	PC1324
Tanaka, Miori	PB0413	Thuengtung, Sukanya	<b>PB0714</b>	Tsai, Mei-Ling	PC1325
	<b>PB0703</b>	Thukhammee, Wipawee	PA0306		PC1304
	PC0501		PA0811		PC1307
	PC1326				PC1308/ FT3-12

Name	Abstract	Name	Abstract	Name	Abstract
Tsai, Pi-Jen	PC0810	<b>U</b>		<b>V</b>	
Tsai, Tsung-Yu	<b>PA0110</b>	Uchibori, Yuki	PC1809	Valdez, Jonathan C	SY17-5
Tsai, Yi-Zhen	<b>PC1309/ FT3-13</b>	Uchida, Takayuki	PC1701/ FT2-13	Valero-Galvan, J	SY03-6
Tsao, Rong	<b>SY36-2</b>	Uchida, Yoshikazu	LS05-3	van de Loo, Fons A.J.	PB0717
Tseng, Yu-Shan	PB0302	Uchitomi, Ran	<b>SY27-5/ YIA-24</b>	Vasquez, Ross D.	<b>SY38-1</b>
Tsuchiya, Youichi	<b>PD0902/ FT3-07</b>	Uchida, Yoshikazu	PC1010/ YIA-27	Vaswani, Ashish	SY25-4
Tsuda, Takanori	PC1003	Uchiyama, Hiromasa	PC1013	Vattem, Dhiraj A.	PB0741
Tsudukui, Tsuyoshi	<b>SY49-5</b>	Udenigwe, Chibuike C.	<b>SY28-3 SY30-1</b>	Veldhoen, Marc	PC0615
	PB1105/ YIA-15		PB0611/ FT1-02	Venkat, Padma	<b>SY31-1</b>
	PC1323/ YIA-33	Ueda, Yuriko	<b>PA0407</b>	Venkatakrishnan, Kamesh	<b>LS10-2</b>
	<b>SY54-3</b>	Uehara, Mariko	SY26-3	Venskutonis, Petras R.	<b>PA0211/ FT2-15</b>
	SY54-6/ YIA-02		PB0413	Vered, Yuval	<b>SY36-4</b>
	PA0403		PC0501		<b>PA0806</b>
	PB0401/ YIA-06	Ueki, Tatsuro	PC1326		SY19-4
	PB0402	Uemi, Miriam	PC1401	<b>W</b>	
	PB0409		PC1801	Wada, Kouhei	<b>PA0805</b>
	PB0414	Uemura, Kunihiko	SY44-4	Wada, Masahiro	PC0503
	PC1317	Uemura, Miyuki	<b>PB0406 PB0407</b>	Wada, Mizusa	PA0203
	PD0303		PD0905	Wada, Moeka	PB1017
	<b>SY32-Op</b>		PB0716	Wada, Sayori	<b>PB0604</b>
	PB1015		PB1101	Wadhwa, Renu	PC0704
	<b>PB1016</b>	Ueno, Ayako	PC0607/ FT3-11	Wagatsuma, Izumi	<b>PC0705</b>
	PC0107	Ueno, Tomoya	PA0707	Wakagi, Manabu	PA0105
	PC1406	Ulla, Anayt	<b>PC1701/ FT2-13</b>		PB0206
	<b>SY54-1</b>	Ulvia, Besty R.	PA0709	Wakana, Daigo	<b>PC1302</b>
	SY54-2	Umeda, Ayumi	PB0736	Waki, Naoko	PC1807
	PB0804	Umeda, Satoshi	PC0610/ YIA-21	Walters, Nico A.	SY57-3
	PC1327		PD0704	Wang, Bi-Heng	PB0729
	SY06-1	Umekawa, Yui	PC0407	Wang, Bing	PA0704
	PC0109	Umeki, Miki	PB0804	Wang, Bo	<b>SY34-2</b>
	PC1805	Umetani, Kana	<b>SY54-4</b>	Wang, Chao	SY35-4
	PC0201	Uneyama, Hisayuki	<b>SY39-2</b>	Wang, Chau-Jong	SY13-3
	PC0202	Uno, Masaharu	PB1016	Wang, Chia-Ying	PC0714
	PC0107	Ura, Chihiro	PC0408	Wang, Chin-Kun	<b>PD0703</b>
	PC0404/ YIA-17	Urabe, Daisuke	PB0109		<b>PL3</b>
	PC0805	Uragami, Rio	PC1903		<b>SY51-1</b>
	SY06-1	Urata, Nana	LS07		PA0211/ FT2-15
	PA0402	Ushiroda, Chihiro	PB1101	Wang, Guangjin	PA0108/ FT1-13
	<b>PB0413</b>	Usumi, Koji	<b>SY22-4</b>	Wang, Hailing	PA0802/ FT1-10
	PC1326	Uto, Takuhiro	PB0902/ FT2-14	Wang, Huiqin	PA0310
	PC0720	Uto-Kondo, Harumi	<b>PC0803/ FT3-06</b>		PA0815
	<b>PC1328</b>		PA0407	Wang, Liping	<b>PC1912</b>
	PD0702/ FT3-09	Utsunomiya, Hirotooshi	SY05-1	Wang, Lou P.	PD0105
	SY32-2/ YIA-38	Uyama, Ayaka		Wang, Mi	PD0615
				Wang, Pan	SY55-5
				Wang, Qiushi	SY35-4
				Wang, Shanshan	PB0207
					SY12-5
					<b>PC0702</b>
					SY35-4



Name	Abstract	Name	Abstract	Name	Abstract
Wang, Shaoyun	PA0802/ FT1-10	Wei, Xin	<b>PB0613</b> PC1808/ FT1-04	Wu, Qiming	<b>FT3-04</b> SY54-6/ YIA-02
Wang, Sheng-Yao	PC1301	Weng, Chia-Jui	PC0210		<b>PB0409</b>
Wang, Shih-Yu	PA0110		PD0717	Wu, She-Ching	PC1331
Wang, Tianze	PD0803	Whisner, Corrie M.	<b>SY40-3</b>	Wu, Shu-Ya	PC1320/ FT3-05
Wang, Tzu-Yu	<b>PC1324</b>	Wichienchot, Santad	<b>PB0807</b>		SY25-4
Wang, WenHao	<b>PA0218</b>		<b>PC1208/ FT1-14</b>	Wu, Wenbin	PC1301
Wang, Xiang-Dong	<b>SY12-1 SY57-1</b>		PD0726/ YIA-39	Wu, Yi-Hsiang Samuel	PD0703
Wang, Xiaoyan	SY02-2	Wiczkowski, Wieslaw	SY03-3	Wu, You-Chia	PC0720
Wang, Yanan	PB0103	Widada, Jaka	SY51-4		
Wang, Ying	PA0302	Widyastuti, Sri	PA0808/ FT2-10	<b>X</b>	
Wang, Yong	PD0108		PD0609/ FT2-11	Xia, Xiufang	PA0603
	PB0404		PA0808/ FT2-10	Xiang, Lei-wen	<b>PA0802/ FT1-10</b>
	<b>PC1411</b>		PD0609/ FT2-11		PD0618/ FT3-15
	<b>PB0619/ FT1-08</b>	Widyaswara, Gravinda	PA0808/ FT2-10	Xiao, Chao-Wu	<b>PB0101</b>
Wang, Zhi-hui	PD0618/ FT3-15		<b>PA0311/ FT2-01</b>	Xiao, Fenglin	SY35-4
Wannanon, Panakaporn	PA0306	Wijaya, C. Hanny	PA0804	Xie, Chen-Yu	PA0102/ FT2-09
Ward, Natalie C.	SY06-4	Wijesekera, Isuru	<b>SY58-1</b>	Xie, Jianchun	PB0408
Watabe, Yuta	PB0410	Willcox, Bradley J.	PA0305		<b>PD0803</b>
Watanabe, Aya	PB0805	Wipawee, Thukham-mee	<b>SY23-3</b>	Xie, Kun	PB0808
Watanabe, Fumio	PA0212	Wong, Kah-Loon	PB0723		<b>PC1329</b>
	PB1005	Wong, Tsz Yan	SY30-5		PC1407
	PB1006	Wongpoomchai, Rawiwan	<b>PB0720/ FT2-05</b>	Xing, Li	SY10-1
	PC0806		PC0706	Xing, Xuerong	PB0209
	PC1702		PC0707	Xu, Bao-Sheng	PD0902/ FT3-07
Watanabe, Hitoshi	LS03		PC0710		<b>PB0601</b>
Watanabe, Jun	PD0103		PC0711/ FT1-05	Xu, Hong Hua	PB0801
Watanabe, Kazuki	PD0908	Wongpraphairot, Suwikran	FT1-05		PB1001
Watanabe, Keisuke	<b>PA0307</b>	Woodman, Richard J.	PB0807	Xu, Huaneng	PB0302
Watanabe, Kyoko	PD0107	Wu, Benyang	SY06-4	Xu, Jiaqing	<b>PA0403</b>
Watanabe, Natsumi	PC1002/ YIA-28		PA0802/ FT1-10	Xu, Xiaojuan	PC1211
	<b>SY58-3</b>		PC0609	Xu, Xiongfeng	PA0114
Watanabe, Shaw	PC1409		SY31-3	Xu, Ying-Yi	PB1104
Watanabe, Shun	<b>SY37-5/ YIA-29</b>	Wu, Chang-Jer	PC0717	Xu, Yuncong	PB0107
Watanabe, Takahiro	PB1016	Wu, Chengfei	<b>PA0102/ FT2-09</b>		PB0725
	PA0203	Wu, Chi-Hao	PC0703/ FT1-06	Xu, Zhiming	PA0712
	PB0102	Wu, Chia-Ching	PB0107		
	PB0807	Wu, Chih-Chung	PB0616	Yabe, Tomio	SY38-2
	PA0306		<b>PA0406</b>		PA0214
	PA0811	Wu, Guoqing	<b>PB1104</b>	Yabuta, Yukinori	PC1203
	<b>PB0609</b>	Wu, Hai-Tao	PC0602		PA0212
	PC0606	Wu, Hongyan	<b>SY24-1</b>		PB1006
	PC0709/ FT2-12	Wu, Hong-Yan	SY33-2	Yahagi, Daishi	PC1702
	PC1334	Wu, James Swi-Bea	PA0114	Yamada, Haruki	PB0722
Weaver, Connie M.	SY40-3	Wu, Jianping	PD0615	Yamada, Kotaro	<b>SY58-2</b>
Weerapreayakul, Natthida	<b>PA0308</b>	Wu, Maggie	<b>SY13-3</b>	Yamada, Mariko	<b>PB0610</b>
	PA0811	Wu, Minchen	<b>PC1901/ FT2-12</b>	Yamada, Misaki	PA0106
	PC0709/ FT2-12	WU, Nana		Yamada, Takaaki	<b>PA0601</b>
Wei, Chia-Cheng	<b>PA0703</b>	Wu, Qian			<b>SY11-1</b>
Wei, Qin	PC1910				

Name	Abstract	Name	Abstract	Name	Abstract
	PC0101		PC0904	Yasutake, Shintaro	PC0108
Yamada, Yasuko	PD0103		PC1014	Yasutake, Shunichi	PB0722
Yamaga, Masayuki	<b>PC0406/</b>		PC1315	Yazaki, Tomoaki	PB0901/
	<b>YIA-20</b>		PC1403		FT3-02
Yamagishi, Kenji	PC0401	Yamashita, Yutaro	PB1013	Yazawa, Nao	PB0717
Yamaguchi, Mana	<b>PB1009</b>		<b>PB1014</b>	Yedidya, Iris	PC1602/
Yamaguchi, Shohei	PA0218	Yamatsu, Atsushi	LS05-3		FT2-06
	<b>PC0802</b>	Yamauchi, Haruna	PB0501	Yen, Chi-Hua	PD0304/
Yamaguchi, Tomoko	<b>PA0405</b>	Yamauchi, Yuki	LS15-2		FT3-08
	<b>PB0713</b>	Yamazaki, Hanae	<b>SY01-2</b>	Yen, Gow-Chin	<b>SY12-4</b>
Yamaguchi, Yasuyo	PC0802	Yamazaki, Satoru	SY16-4	Yen, Yu-Wen	PD0711
	PC1336	Yan, Hongxiao	PB0302	Yin, Sheng	<b>PA0101</b>
Yamaguchi, Yuji	PC0715	Yanagita, Teruyoshi	PC0107	Yin, Yulong	SY26-4
Yamaguchi, Yusuke	<b>SY30-4</b>	Yanai, Nobuya	PC1005	Ying, Linlin	SY35-4
	PB0607/	Yanaka, Noriyuki	PB0105/	Yogo, Yuya	PB1017
	FT1-01		YIA-04	Yokoyama, Daigo	PA0604
	PB0608/		PB0717		PC0903
	FT1-12	Yang, Cheng	<b>PB0302</b>	Yokoyama, Shin-ichiro	PC0403
	PB0901/	Yang, Chung S.	<b>SY15-1</b>	Yokoyama, Wallace	<b>SY49-1</b>
	FT3-02		SY23-5	Yoo, Jihee	<b>PC1001</b>
	PB0902/		SY33-2		<b>PC1008</b>
	FT2-14		PC0614	Yoo, Sang-Ho	PB0201
	PB0903/	Yang, Fan	PD0802		PB0202
	FT3-03	Yang, Hee-Jong	PA0816	Yoojam, Sittikorn	<b>PA0509</b>
Yamaji, Ryoichi	PA0605	Yang, Hong-Kyung	<b>PC1914</b>	Yoon, Suk-Hoo	<b>SY05-5</b>
	PC1002/	Yang, Jiengang	PD0706	Yoshida, Akari	PC0713
	YIA-28	Yang, Kyungjik	<b>PC1202</b>	Yoshida, Hiroki	PC1327
	PC1014		PD0603	Yoshida, Hiroshi	<b>SY02-4</b>
	PC1404	Yang, Shun-Fa	PD0717	Yoshida, Jun	<b>PC1330</b>
Yamamoto, Ayaka	PA0707	Yang, Xiao	PD0802	Yoshida, Kazutaka	<b>SY57-4</b>
Yamamoto, Chihiro	PC0103	Yang, Xuelian	<b>PB0408</b>		<b>PC1313</b>
Yamamoto, Haruka	PB0716	Yang, Ya-Ting	PC1325		PC1903
Yamamoto, Kazushi	PC0504	Yang, Yen-Ju	<b>PA0301</b>	Yoshida, Takuya	PB0602
	PC1333	Yang, Yini	PB0411	Yoshikawa, Kazunobu	PB0605
Yamamoto, Kei	PC0202	Yang, Yu-Hong	PB0415		PB0613
Yamamoto, Norio	PC1404		<b>PC1705</b>		PC1808/
Yamamoto, Sho	<b>PB0809</b>	Yano, Akira	<b>SY03-5</b>		FT1-04
Yamamura, Haruo	SY04-5/	Yano, Hiromi	PB0208	Yoshikawa, Masayuki	PC1336
	YIA-18	Yano, Tomohiro	PC0713	Yoshikawa, Miki	<b>PC1014</b>
	PC0402/	Yanti	<b>SY11-5</b>	Yoshikawa, Yuko	PD0301/
	YIA-10		<b>PC1310</b>		YIA-37
Yamamura, Junichi	PB1015	Yashiro, Takuya	<b>PC0204</b>	Yoshimi, Kazuto	PC0103
Yamanaka, Daisuke	SY38-4	Yashiro, Youichi	PC0101		PC0104
Yamanaka-Okumura, Hisami	SY33-6		PC0601	Yoshimoto, Kohki	<b>SY33-4</b>
	PC0302	Yasuda, Kaori	SY04-2	Yoshimoto, Naoko	<b>SY14-1</b>
Yamane, Takuya	PB0614		PB1017	Yoshinaga, Marcos Y.	SY27-1
Yamanishi, Rintaro	<b>PC1703</b>		PC0408		PD0106/
Yamasaki, Hiroo	PC0802		PC0409		YIA-36
	PC1336		<b>PD0908</b>	Yoshino, Nanami	PA0304
Yamasaki, Keiji	PB0712	Yasuda, Michiko T.	<b>PC1905</b>	Yoshino, Tomoyuki	PD0709/
Yamasaki, Masao	SY10-3	Yasukawa, Kiyoshi	PA0402		FT2-07
Yamashita, Chika	<b>PC1601</b>		PB1017	Yoshioka, Kiyoshi	SY27-5/
Yamashita, Takatoshi	PC0903	Yasukawa, Zenta	SY17-4		YIA-24
Yamashita, Yoko	<b>SY41-3</b>		PB0812	Yoshioka, Yasukiyo	<b>PB0203</b>
	PA0604		<b>PC1206</b>		<b>PB0204</b>
	PC0902/	Yasunaga, Akari	PB0722	Yoshitomi, Ren	<b>PB0721/</b>
	YIA-23	Yasuo, Shinobu	<b>SY41-2</b>		<b>YIA-09</b>

Name	Abstract	Name	Abstract	Name	Abstract
Yoshizawa, Minako	PB0211	Zhang, Yanping	SY10-1		
Yotsumoto, Hiroaki	PC0107	Zhang, Ye	<b>PC0405/</b>		
Yu, Guoping	<b>PA0603</b>		<b>YIA-19</b>		
	PB0601	Zhang, Ying	SY08-4		
	PB0801	Zhang, Yumei	<b>SY56-4</b>		
	PB1001	Zhang, Yun-Xuan	SY23-5		
Yu, Miao	PA0101		PC0613		
Yu, Xiaotong	PB0615		PC0614		
Yu, Yi-Ping	PA0301	Zhang, Zhen	PB0404		
	PD0703	Zhao, Dan	PC1704		
Yu, Yue	PC0704	Zhao, Guixing	PA0108/		
Yu, Zhaoshuo	PD0105		FT1-13		
Yuan, Fengjiao	PA0114	Zhao, Mengyao	<b>PD0803</b>		
Yuan, Sihao	PB0907/	Zhao, Yu-Jie	<b>PC1210</b>		
	YIA-13	Zhen, Dawei	PD0803		
	PC1902/	Zheng, Huanyu	PA0603		
	YIA-35	Zheng, Jie	SY07-4		
Yuan, Xunmei	<b>SY20-4</b>		<b>PD0710</b>		
Yuasa, Keizo	PC1406	Zheng, Yi-Lin	PC0613		
Yue, Chonghui	PA0603	Zhmykhova, Yulyia	PC1602/		
Yuine, Nanako	PB0410		FT2-06		
Yukizaki, Chizuko	PC1311	Zhong, Xiancai	PC1913		
Yura, Shiori	PC0204	Zhou, Jianwu	<b>PA0310</b>		
Yusraini, Era	PB0728/		PA0711/		
	FT2-04		FT1-11		
Yuyama, Kohei	<b>LS01</b>		PA0815		
			PC1912		
			PD0105		
<b>Z</b>			<b>PD0612</b>		
Zalinar Udin, Linar	PC0505/	Zhou, Peng	PD0614		
	FT3-14		<b>PB0411</b>		
Zang, Xiaodan	PA0603	Zhou, Qi	PA0107		
Zawistowski, Jerzy	<b>SY36-5</b>	Zhu, Xiaoyu	PB0813		
	<b>PD0904</b>		PB0209		
Zempleni, Janos	<b>SY37-1</b>	Zhu, Yueming	<b>SY33-2</b>		
Zeng, Yan	<b>PB0209</b>	Zi, Xiaolin	<b>SY19-4</b>		
Zhai, Xiaotong	<b>PD0615</b>	Zini, Avi	<b>PC0105</b>		
Zhang, Bixian	PA0108/	Zorig, Anuu	PD0105		
	FT1-13	Zou, Jianqiao	<b>LS05-2</b>		
Zhang, Chong	PB0813	Zujur, Denise			
Zhang, Chunlei	SY18-1				
Zhang, De-Cong	PB1104				
Zhang, Gaopeng	PA0807				
Zhang, Jiahong	PB0103				
Zhang, Lianfu	PB0302				
Zhang, Lina	PD0612				
	PD0614				
Zhang, Min	SY08-4				
Zhang, Ning	<b>PB0404</b>				
Zhang, Shu	<b>SY54-2</b>				
Zhang, Shuwei	SY15-5				
Zhang, Tianshun	<b>SY12-5</b>				
	PC0702				
Zhang, Ting	PA0114				
Zhang, Tong	PB0209				
Zhang, Xiangyu	PB0408				
Zhang, Xiu-Ling	PB0601				



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マンナンヒカリ 525g  
(スティックタイプ)  
75g (1合相当) × 7袋

おいしさも量そのまま、  
お米と混ぜて炊くだけで糖質 & カロリーカット。  
食物繊維もとれます。

ふつうのごはん			マンナンごはん		
1膳 (150g) 当たり			*カロリー-33%カットの場合 1膳 (150g) 当たり		
糖質	カロリー	食物繊維	糖質	カロリー	食物繊維
55.2g	252kcal	0.45g	36.6g	165kcal	4.8g

\*炊きあがり2合の場合: お米 1合とマンナンヒカリ 1袋 (75g) で炊飯。  
「日本食品標準成分表 2015年版 (七訂) 水稲めし・精白米参照。」

Otsuka 大塚食品

Otsuka Foods Co., Ltd.

3-2-27, Otedori, Chuo-ku, Osaka-shi, Osaka, 540-0021  
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「フレイル対策」サポートの  
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を目指しています

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Sample Courtesy of Jana Doehner and Urs Ziegler, Center for Microscopy and Image Analysis, University of Zurich.

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## ANNOUNCEMENT

# Journal of Functional Foods will become gold open access

At Elsevier, our goal is to provide researchers with flexible and high-quality publication options. As part of that ongoing commitment, we have been reviewing our current titles to ensure they reflect the changing needs of our authors and readers.

Therefore, we are pleased to inform you that in January 2020 *Journal of Functional Foods* will become an open access journal with no subscription charges.

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*Journal of Functional Foods* wishes to give authors the possibility to publish your top-quality papers in a well-established leading journal in food and nutrition fields. The journal will keep its rigorous criteria to screen high impact research addressing relevant scientific topics and performed by sound methodologies.



### About Journal of Functional Foods

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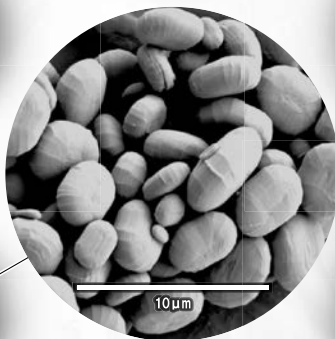
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血糖値  
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(EOD-1株)  
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10 μm

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Sunstar (Sunstar research, 2017 \*3)

"Midori de Salana" is the only Food for Specified Health Uses in Japan that contains natural amino acids (SMCS), which helps lower cholesterol.



Sunstar's "Midori de Salana" is the first product got permission from the government of Japan labeling for Food for Specified Health Uses in 2008, containing SMCS derived from broccoli and cabbage act to lower cholesterol.

\*1: Sunstar research. Reference: "List of Approved (Authorized) Foods for Specified Health Uses", Consumer Affairs Agency, March 2016. \*2: Sales performance Feb. 2009 - end of May 2018. \*3: Sunstar research. Sales performance (monetary share) within foods (beverages) sold by Sunstar, calculated Jan. 2017 - end of Dec. 2017.



食生活は、主食、主菜、副菜を  
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大阪 : 〒531-0072 大阪府大阪市北区豊崎 3-19-3 ピアスタワー 3F  
[www.sciex.jp](http://www.sciex.jp) Email : [jp\\_sales@sciex.com](mailto:jp_sales@sciex.com)

FUJICCO is proud of being at the forefront of Soy study from research and development to product manufacturing technology.

'Fujiflavone' is developed in the process of pursuing the characteristics of Soy and the successful extraction of isoflavones which promote bone formation.

Fujiflavone<sup>TM</sup>

フジフラボン



Food ingredient for 'Foods with Functional Claims'

Functional food material for contributing to beauty and health in various ways.

### Applications

- Functional foods (For bone health, menopause symptoms and beauty)
- Drinks
- Confectionery
- Weight control foods
- Cosmetics

FUJICCO, the top manufacturer of soybean processed food in Japan provides isoflavone as 'Fujiflavone'

High content of low-molecular-weight proanthocyanidins

CHRONO-CARE SP  
Black Soybean Polyphenol

クロノケア<sup>®</sup> SP

### Features

- High water solubility
- Top-class anti-oxidant value
- Improvement of blood flow and vascular endothelial function
- Anti-glycation effect
- Improvement of Lipid metabolism
- Beauty effect

### Applications

- Dietary Supplements
- Drinks
- Cosmetics



FUJICCO Co., Ltd.

Medical Care Food Supply Sales Division  
Health Care Food Group

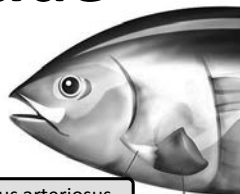
6-13-4 Minatojima-Nakamachi, Chuo-Ku, Kobe 650-8558, JAPAN

Tel: +81-78-303-5925 Fax: +81-78-303-5946

URL: <https://www.fujicco.co.jp> E-mail: [f-fid@fujicco.co.jp](mailto:f-fid@fujicco.co.jp) Staff: Takaki and Okabe

# Bonito Elastin Peptide

This product contains marine elastin peptide derived from highly flexible bulbus arteriosus.



Bulbus arteriosus

Heart

- Elastin is the core protein, which gives elasticity to tissues, such as skin, aorta, ligaments, and lungs.

## Evidence

- 【Beauty】 Effects on skin condition and breast area
- 【Health】 Effect on blood vessel
- 【Locomotive syndrome】 Effect on knee joint pain
- 【Sports】 Effect on ligament

## Product specifications

Desmosine and Isodesmosine : More than 0.1%

- \* Desmosine and Isodesmosine :  
The elastin-specific crosslinking amino acids

# Water Chestnut Extract

- The active ingredient of this product is boiled water chestnut rind extract.
- This ingredient has a long and rich history of use in teas.



• Ingredient: water chestnut

## Evidence

- 【Clinical study】 Significant improvement in skin elasticity
- 【Anti - glycation】 Generation suppression of AGEs
- 【Blood sugar】 Control post-prandial increases in blood sugar
- 【Cleavage of glycated products】 Cleavage of carbonyl groups

## Product specifications

Total polyphenol: More than 25%

# Ascophyllan HS



- This product is extracted from the seaweed *Ascophyllum nodosum*.
- *Ascophyllum nodosum* has rich eating experience.

## Evidence

### 【Immunostimulatory activity】

Prevention of pneumonia, Anti-tumor activity

### 【Blood sugar controlling activity】

Intestinal GLP-1-mediated control of blood sugar levels

• Ingredient: *Ascophyllum nodosum*

## Product specifications

Ascophyllan amount: Not less than 20%

HAYASHIKANE SANGYO CO., LTD.

SALES DEPT. OF FUNCTIONAL FOOD DIV.

4-8-2-CHOME. YAMATO-MACHI  
SHIMONOSEKI-SHI 750-8608 JAPAN

TEL: +81-83-266-1191 FAX: +81-83-266-6461  
URL: <http://www.hayashikane.co.jp>

# 健康と美容をサポートする ニップンの健康素材シリーズ

**機能性表示**

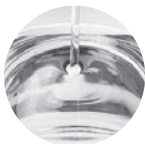
対応素材\*

## アマニ油/ アマニ油プレミアムリッチ

アマニを圧搾法(コールドプレス)により搾油・精製したクセのない植物油です。α-リノレン酸を60%以上含有するプレミアムリッチもご用意しています。

※弊社のアマニは、食品用に開発された「ゴールデン種」のみを使用しています。

サプリメント、スープ、パン菓子類、ドレッシングなどに。



**機能性表示**

対応素材\*

myoceram®

## セラミド【美容素材】

米由来 RPS/RLG/RE

トウモロコシ由来 CP

米、トウモロコシを原料に抽出した素材。独自の抽出・精製方法により、色や味、匂いに影響する不純物が少なく加工適性にも優れています。

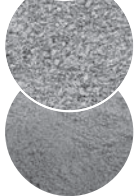
サプリメント、飲料、ゼリー、化粧品などに。



## ローストアマニ 粒/粉末/粉末F

アマニをローストして香ばしく仕上げました。オメガ3脂肪酸、食物繊維、ポリフェノール的一种であるアマニリグナンを含みます。粒・粉末の他、より細かな粉末に仕上げた粉末Fもご用意しています。

パン、菓子類、シリアル、サラダ、ヨーグルト、アイスのトッピング、ふりかけなどに。粉末Fはスムージーなどの飲料にも。



## オリーブ果実 マスリン酸

【関節と筋肉のサポート素材】

オリーブ果実から希少成分を抽出。主成分としてトリテルペン類であるマスリン酸を含有しています。熱への安定性に優れ、加熱調理をする食品にもご利用可能です。

サプリメント、グミ、飴、ゼリー、プロテインなどに。



## アマニリグナン

アマニに含まれるポリフェノール成分。水溶性のため飲料にも使えます。

サプリメント、飲料、ゼリーなどに。



## 小麦ふすま

国産小麦ふすまのみを原料に、特殊加熱加工し、従来品より食べやすくなりました。食物繊維が豊富な素材です。

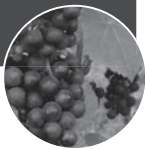
パン、菓子、麺類などに。



## パミスエキス 【口腔ケア素材】

赤ワイン製造時に発生する搾り粕(パミス)より抽出。主成分としてオレオノール酸を含有しています。

グミ、ガム、タブレット形状の口中清涼剤などに。



## 小麦若葉 【オーガニック素材】

有機栽培した若葉を新鮮な状態のまま、まるごと乾燥粉砕しました。有機JAS取得。えぐみ苦味のないナチュラルなおいしさです。

青汁、スムージー、パン、菓子、麺類、和菓子などに。



※アマニ油、セラミドについては **機能性表示** に関するご相談もお受け致します。

# Natural Human type Ceramide

## 天然ヒト型セラミド

### Very Long Chain Phytoceramide

#### History



It has been over 100 years since the renowned skin-brightening ingredient, kojic acid was discovered from koji mold, *Aspergillus oryzae*, the naturally occurring culture that has been used for centuries in Japan to make soy sauce, sake and miso.

We are proud to announce the discovery of our revolutionary ceramides from Koji. The world's first Natural human-type ceramide created through the traditional Japanese soy sauce fermentation process is safe, effective and stable.



#### What are Ceramides?

Ceramides are biogenic components found in the skin's outer layer. Its function is to protect against moisture loss to keep skin both youthful and supple.

The loss of ceramides causes aging skin permeable to moisture, leaving skin dry

#### Process

Our scientist has developed a unique process to extract Natural human-type ceramide from the byproduct of the centuries-old soy sauce-making process.



Soy Sauce Cake



Extract



High Purity  
Ceramide Powder

#### 6 Key Characteristics

Increase skin's water-retention capacity

Barrier repair and cell regulation

Protect skin and prevent moisture loss

Improve skin texture

Renew, rebuild and restore aging skin

Reduce roughness and dryness

#### Food Ingredients:

**Natural phytoceramide**  
Phytosphingosine binding ceramide, human-type with intestinal absorbability

**Natural sphingomyelin**  
Water dispersible

**Natural polyphenolipid (oil-soluble polyphenol)**  
Long chain alkyl derivatives of caffeic acid such as palmitoyl caffeate

**Natural black sesame polyphenol**  
Phenolic polymer extracted from organic black sesame seed coat

Contact information

TEL. 03-6809-3650 FAX. 03-6809-3653

**Genuine R&D Co., Ltd. 株式会社ジェヌインR&D**  
**Tokyo office //**

Rohto Tokyo Building 5F, 1-7-5 Shiba Minato-ku, Tokyo 105-0014

E-mail : [info2@genuinerd.co.jp](mailto:info2@genuinerd.co.jp)

<https://genuinerd.com>

 **Genuine**  
R & D

NISSHIN  
**Oillio**

"The Natural Power of Plants"

# MCT CHARGE!!

*Move and burn your body fat*  
*Pursue your ideal physical condition*



Nisshin Oillio's MCT



The Nisshin Oillio Group, Ltd. [www.nisshin-oillio.com](http://www.nisshin-oillio.com)

A grayscale microscopic image of a cell culture, showing numerous rounded, interconnected cells with visible nuclei and cytoplasm. The cells are arranged in a dense, somewhat irregular pattern, typical of a monolayer culture.

# POST BIOTICS®

腸内細菌代謝物＝ポストバイオティクス!?

健康と信頼をお届けする



日清製粉グループ

日清製粉グループオリジナルキャラクター  
”ゴニヤラ”と”子ゴニヤラ”

おなか  
すいたね。



© 2015 Studio Ghibli



日清製粉グループ

<https://www.nisshin.com/>

Nisshin Seifun Group Inc.



True to nature, the flavor of

# KAGOME



# ファイトケミカルスをリードして85年

ニュートリライトはビタミンおよび栄養補給食品における

売上高**世界No.1ブランド**\*



 **NUTRILITE™**



ニュートリライトの  
詳細はコチラ

Science. Art. Love.

**POLA**

**POLA White shot  
INNER LOCK TABLET IXS**

Formulated to promote crystal clear  
transparent skin from within.



Simply you. Simply beautiful.

**ORBIS**

**ORBIS DEFENCERA**

The first food\* for skincare that is  
permitted to display its function in Japan.

\*As a product for sale

The product contains glucosylceramide derived from rice  
germs to retain moisture in the skin. This product is ideal  
for people with dry skin. Healthy balanced diet consists of  
main dish, main vegetable dish, and a side vegetable dish.



 **POLA ORBIS**  
HOLDINGS

Sensitize the world to beauty.

POLA ORBIS HOLDINGS INC. c/o POLA CHEMICAL INDUSTRIES, INC. POLA R & M  
560 Kashio-cho, Totsuka-ku, Yokohama-shi, Kanagawa 244-0812 JAPAN +81-45-826-7131

Looking toward 2030

# Becoming an advanced daily healthcare company

We will realize “healthy minds bodies for all,” through the “ReDesign” of the everyday rituals to become more natural, easy and enjoyable. To this end, we will create “customer experience-based value” in the areas of health, comfort and cleanliness.

life.love.  
**LION**



## LION's Functional health food with health claim



Lactoferrin health food market  
**No.1** in sales for 10 consecutive years<sup>\*1</sup>

Survey by Yano Research Institute

<sup>\*1</sup> : Health foods (for supplement-shaped products) domestic market containing lactoferrin as the main component, 2008-2017 manufacturer shipment value base series products total value. Survey by Yano Research Institute, Inc. As of June 2019. <sup>\*2</sup> : Survey by LION. As of August 2019

**2,000,000**  
Lactoferrin Series Cumulative experience exceeded 2.0 million<sup>\*2</sup>

Survey by LION

If you are interested, please come to the **LION** booth.

Glico

FDA Notified GRAS

**QUICK AND SUSTAINABLE ENERGY**

- **HIGH** absorption
- **FAST** gastric emptying time
- **STRONG** stamina



**Cluster Dextrin**<sup>TM</sup>  
New Energy Source for Athletes

**HBCD**

Highly Branched Cyclic Dextrin

**Glico Nutrition Co., Ltd.**  
**GLOBAL SALES GROUP, SALES DIVISION**

4-6-5, Utajima, Nishiyodogawa-ku, Osaka, 555-8502, Japan  
FAX: +81-6-6477-8673

E-MAIL: [g-ingredients@glico.com](mailto:g-ingredients@glico.com)  
<http://www.glico.com/nutrition/en/>

# For Promotion of Health



湧永製薬が創製した  
ニューキノロン系抗菌剤  
「Delafloxacin」



湧永製薬 広島工場



HLAタイピング試薬

創業以来、天然素材に着目し数々の製品を生み出して参りました。特にニンニクを長期間熟成することによって得られた熟成ニンニク抽出液は、その有用性・安全性が高いことが示されており、人々の健康増進に寄与しています。当社は国内のみならず、アメリカ、ドイツ、イタリア、イスラエル、オーストラリア等の大学・研究機関との共同研究を行い、多数の論文・学会発表を行ってきております。さらに当社はニンニク研究のほか、創薬研究や試薬診断薬の開発も進めています。

「第6回 国際ニンニクシンポジウム」が日本（広島）で開催され、ニンニク及び熟成ニンニク抽出液の動脈硬化・高血圧や歯周病などへのリスク軽減効果について数々の発表及び活発な議論がなされました。

<主な発表内容>

- ・生物・薬理活性物質の探索分離と機能解明
- ・循環器基礎臨床研究
- ・炎症免疫調節
- ・脳神経機能
- ・口腔疾患
- ・代謝

本シンポジウムのプロシーディングスがExperimental and Therapeutic Medicineにまもなく掲載予定です。

## 当社の論文・特許紹介

ニンニクの基礎・臨床研究 論文・学会発表総数 640件以上

- ・Suzuki J et al. Anti-inflammatory action of cysteine derivative S-1-propenylcysteine by inducing MyD88 degradation. Sci Rep. 8(1):14148, 2018.
- ・Moriyama N et al. Aged garlic extract suppresses inflammation in apolipoprotein E-knockout mice. Mol Nutr Food Res. 61(10), 2017.
- ・Nakamoto M et al. Isolation and identification of three g-glutamyl tripeptides and their putative production mechanism in aged garlic extract. J Agric Food Chem. 66(11):2891-2899, 2018.

試薬診断薬の開発 論文・学会発表総数 180件以上

- ・Nakamura T et al. Detection of Intra-graft Anti-Blood Group A and B Antibodies Following Renal Transplantation. Transplant Proc. 51(5):1371-1377, 2019.

創薬研究 論文・学会発表及び特許総数 600件以上

- ・Kinoshita T et al. NOVEL PYRIDONE CARBOXYLIC ACID DERIVATIVE OR SALT THEREOF, WO2017217441
- ・Yamaguchi T et al. NOVEL PYRIDONE CARBOXYLIC ACID DERIVATIVE OR SALT THEREOF, WO2018174266

論文一覧：<http://www.wakunaga.co.jp/paper/>

## Wakunaga Pharmaceutical

湧永製薬株式会社




**EMIQ**<sup>®</sup>  
Quercetin glycoside


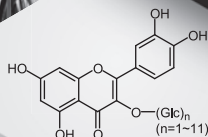


-Enzymatically modified isoquercitrin-

Our original ingredient, EMIQ<sup>®</sup>, is a flavonoid composed of glucose moieties attached to a base structure of quercetin. EMIQ<sup>®</sup> is derived from the Japanese pagoda tree (*Sophora japonica* L.).



**High bioavailability**  
EMIQ<sup>®</sup> is 17 times  
more bioavailable  
than quercetin.



**Dec. 2nd 10:00AM - 12:00PM**  
ICoFF2019-Sponsored Session  
"The effects of highly bioavailable  
quercetin glycoside and curcumin"

**Exhibition booth**  
ICPH2019 & ICoFF2019

### Function of EMIQ<sup>®</sup>

- Anti-hay fever
- Anti-hypertensive
- Anti-arteriosclerotic
- Improves endothelial function

We also offer many other functional materials.

EMIQ<sup>®</sup> | Curcumin | Lutein | [www.saneigen.com](http://www.saneigen.com)



Since the establishment of San-Ei Gen F.F.I., Inc. in 1911, our mission has been to deliver healthy lifestyles and the pleasure of eating through our food additives. As a member of the UN Global Compact, we continue to pursue the deliciousness and safety of food, as well as contribute to the creation of a sustainable society.

 **San-Ei Gen F.F.I., Inc.**  
Passion for food. Compassion for people.

1-1-11, Sanwa-cho, Toyonaka, Osaka 561-8588, JAPAN  
Phone +81-6-6333-0521 Fax +81-6-6333-1219



# Wellnex

## Collagen Peptides

### IMPROVEMENT OF HYPERGLYCEMIA

A clinical trial was conducted with diabetes patients by which test subjects, in addition to standard diabetes treatment, were given a 5-10g dose of **Wellnex** over a 12 week period. Improvement was observed in terms of fasting blood sugar (FBS) over time, HbA1c (glycated hemoglobin; an indicator of average blood sugar) and insulin resistance. These results suggest that **Wellnex** are effective when used in conjunction with other medication.

### VASCULAR REJUVENATION

Collagen is one of the major substances that comprise blood vessels. By taking in more collagen peptides, it enhances the collagen-formation ability of cells and, by that, restores the suppleness of blood vessels.

In experiments with anti-aging dock, it was found that a daily intake of 2.5g of **Wellnex** over a three month period led to an improvement in pulse wave velocity (an indicator of atherosclerosis) and a 5-year diminishment in vascular age. These results are suggestive of an atherosclerotic improvement effect.

## Clinical Results for Health Support

<https://www.nitta-gelatin.co.jp/en/index.html>



レスリング男子 日本代表  
乙黒 拓斗

さあ、栄養で応援だ。

「試合前に実家に帰ると、母はいつもバランスを考えた食事を用意してくれれます」と乙黒選手は話してくれた。食事って、大切な人へのエールだと思う。がんばれ。負けるな。強いからだになれ。そんな気持ちの側に、いつも寄り添っていたいから。明治は、がんばる人と支え続ける人を、さまざまな「ひとくちの力」で応援します。

**POWER!**  
**ひとくちの力**



TOKYO 2020



**meiji**

東京2020オリンピックゴールドパートナー(乳製品・菓子)



【消費者庁許可・特定保健用食品】

食後の血糖値が高めの方に。  
炭水化物などの糖の吸収を  
おだやかにします。



食生活は、主食、主菜、副菜を基本に、食事のバランスを。

小林製薬の

# サラシア100

特許成分「ネオコタラノール」(特許第4486792号)

10年以上に及ぶ近畿大学薬学総合研究所との共同研究を経て、  
ようやく製品化に至りました。

許可表示

本品は天然のサラシアを原料とし、ネオコタラノールを含んでいるため、食事に含まれる糖の吸収をおだやかにする働きがあります。食事とともに  
お飲みいただくことで、食後血糖値の上昇がゆるやかになるので、食後の血糖値が高めの方、食事に含まれる糖質が気になる方に適した食品です。

1日の目安  
3粒



小林製薬 サラシア

検索

**KOBAYASHI Pharm. Co., Ltd.**

あなたの舌をチェック!



スツクリ実感!

舌苔に含まれるカビのフィルム<sup>※</sup>に着目!

※カビのフィルムとは…カビは白いフィルムを口腔内や舌に作ります。

カビの作り出すフィルムは、口だけではなく、様々な全身トラブルの原因の1つになりうる指摘されています。

帝京大学と  
共同開発した独自成分  
ドゥーマック  
**DOMAC** 配合

# UHA シタクリア

## 商品ラインナップ

キャンディタイプ

7日分



大粒サイズ

タブレットタイプ

21粒入

約50粒入



大粒サイズ

ジェルタイプ

5g×100包入



小粒サイズ



レモン味の  
飲みやすい  
ジェルタイプ

※商品の規格変更などにより、製品記載の内容と異なる場合がございます。必ずお手元の製品パッケージの表示をご確認ください。

商品に関するお問い合わせはこちら

©味覚糖株式会社お客様相談センター

**UHA** 味覚糖



**0120-557-108**

土日祝を除く  
9:00~17:00

〒639-1031 奈良県大和郡山市今国府町 137-5

UHA シタクリア ホームページ ▶ <http://www.uha-domac.com>



UHA Mikakuto Co., Ltd.

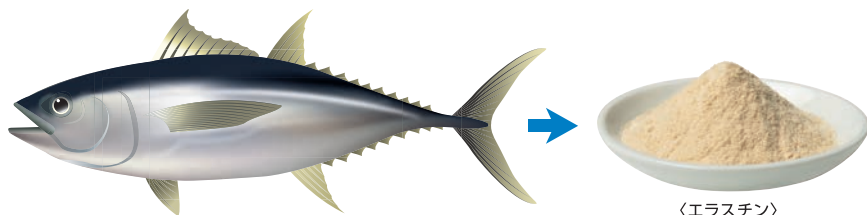
「シーチキン」のはごろもフーズから

マグロ由来の機能性素材

# マグロエラスチン

TUNA ELASTIN

マグロを知り尽くした「はごろもフーズ」。  
その恵みを余すところなく活かし、  
稀少素材「エラスチン」を抽出しました。



## エラスチンの健やかな機能性

中高年層の「気になる」部位にエラスチンが関係！

肌

血管

靱帯

肺

「シーチキン」レベルの安心、安全

良質な原料の仕入れから製品製造まで、はごろもフーズが一環して管理。ご家庭で親しまれているシーチキンの品質そのままに、安心と安全をお届けします。

※ **シーチキン** は、はごろもフーズの登録商標です。

**Hagoromo** はごろもフーズ  
HAGOROMO FOODS CORPORATION

はごろもフーズ株式会社 バイオユニット  
〒425-0065 静岡県焼津市物右衛門字稗島1225-8  
TEL.054-623-1391 FAX.054-623-4688